

COUNTRY GUIDE

THE FARM MAGAZINE

U. 63 #5

Swine Program Expands

Soil Drifting in Prairies

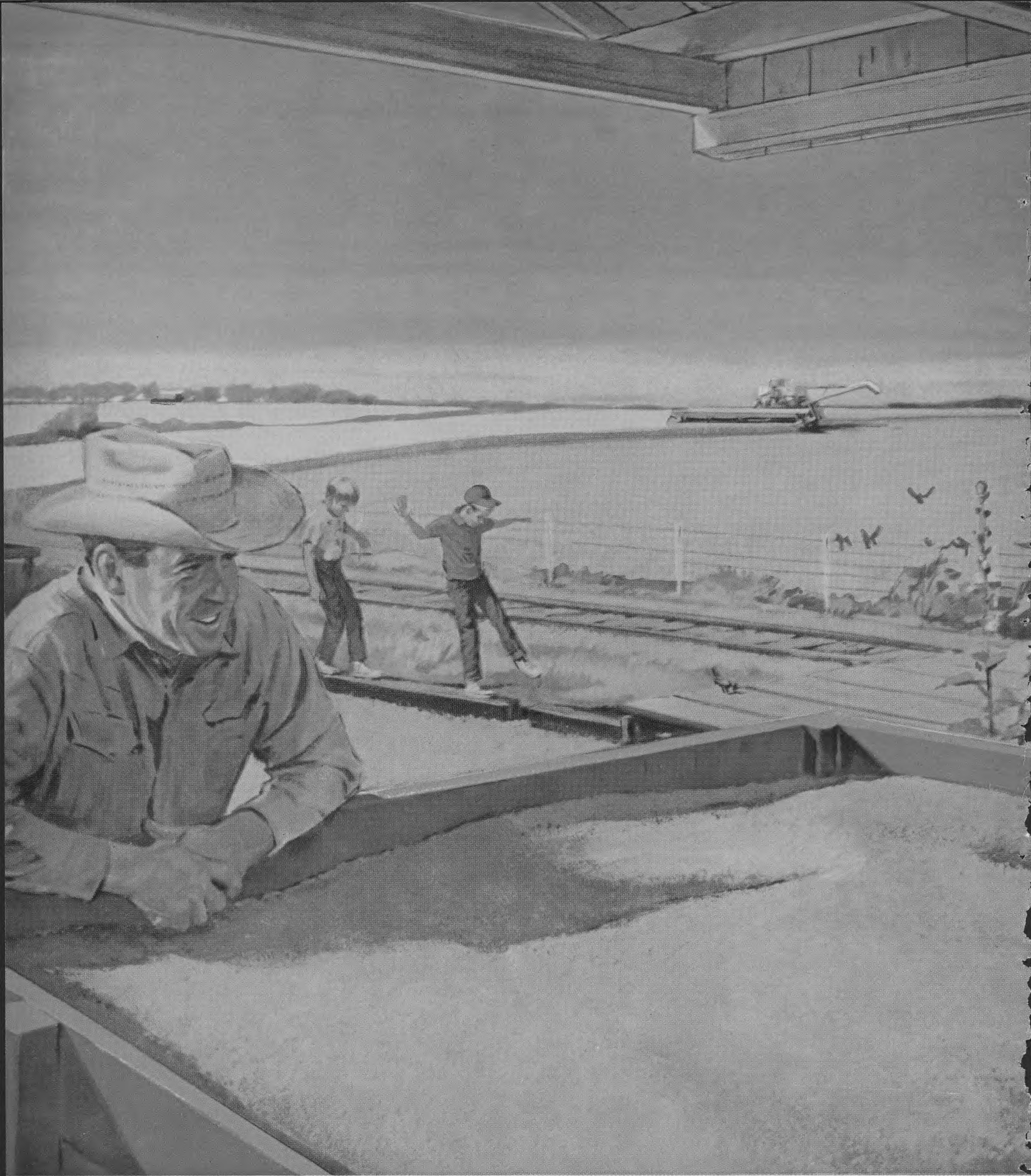
Preparing Fair Entries

GENERAL SCIENCES

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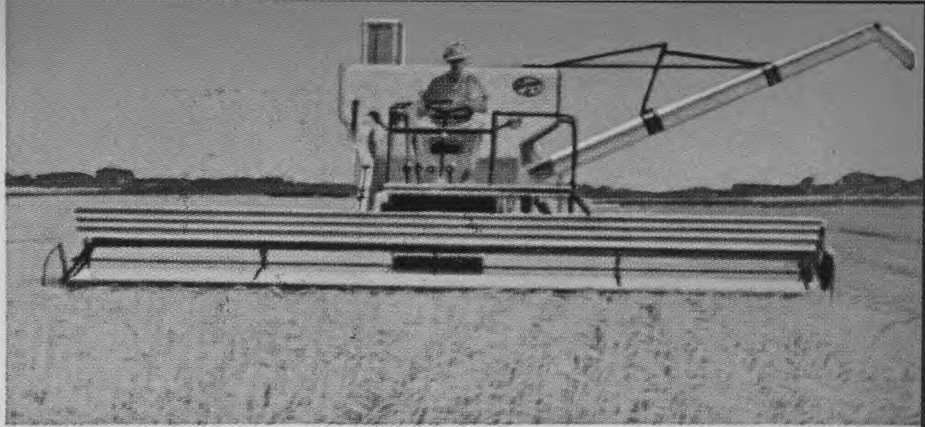
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**“I see you bought
a Gleaner...”**

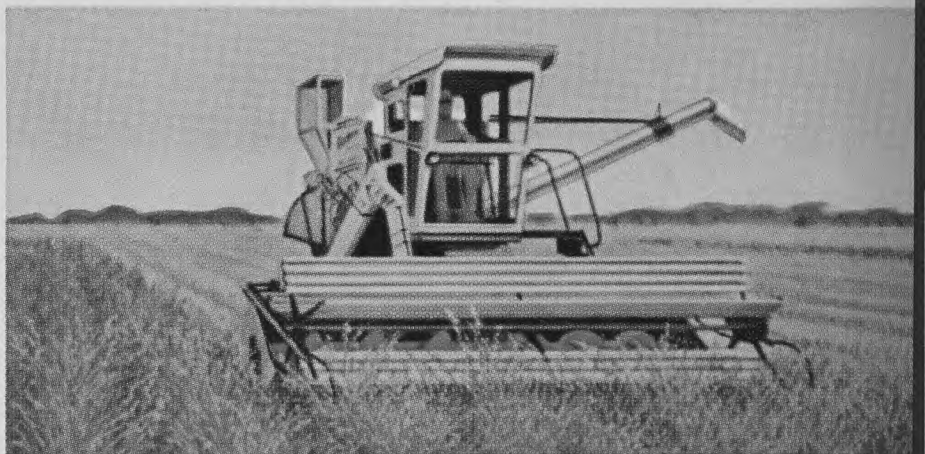
He knew when he looked at it. He knew when he handled it. This crop is GLEANER clean. Can a man tell? Of course. Happens every day during the harvest season. An elevator man can look at a GLEANER-combined crop, pour it from hand to hand—and he knows. After all, farmers and custom operators and elevator men—the folks who judge performance—gave GLEANERS their great name.



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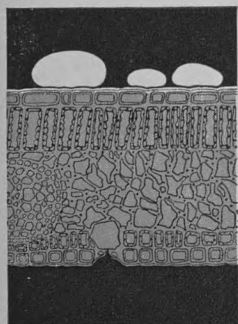


THE COMBINES FOLKS HAVE GIVEN A GOOD NAME TO

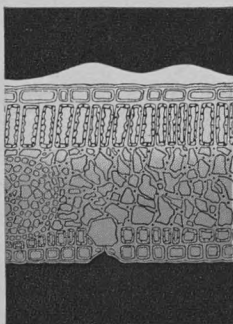
That's why more and more people talk to the Allis-Chalmers dealer about harvesting a grain crop, or a corn crop, or a bean crop, or a seed crop. One GLEANER owner tells another. About the down-front cylinder; the greater separating area (measured in feet, not inches); about capacity, operator comfort. Sure, elevator men appreciate a GLEANER-harvested crop. Owners do too.



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*REGISTERED TRADEMARK

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COUNTRY GUIDE

Vol. 83, No. 5 — MAY 1964

THE FARM MAGAZINE

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In This Issue

As work horses vanish from our farms, their places are sometimes being taken by the lighter breeds. One of the most popular of these is the Arab. Alberta rancher's wife Mary Burpee tells how it is being used more and more on ranches in both Western Canada and the United States. She is one of many firm admirers of this small horse which, she claims, packs a lot of courage, endurance, loyalty and plain good horse sense within its beautiful body.

Also in this issue, Cliff Faulkner describes a new hog feeder barn that is windowless, slat-floored, fully ventilated and partitioned with concrete. From Ontario comes a description of how Ontario's specific pathogen free swine program is getting into high gear with phase two—the establishment of what are called secondary herds.

Spring seeding time is when farm chemicals come into greater use again. An article this month tells why we couldn't get along without these chemicals. There is a word of caution too! We will have to use them with much more care, or governments will be compelled to impose more licenses and restrictions, making these chemicals more costly to use in the future.

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COVER: Holstein cows eating haylage or low moisture silage.
—Peter Lewington photo

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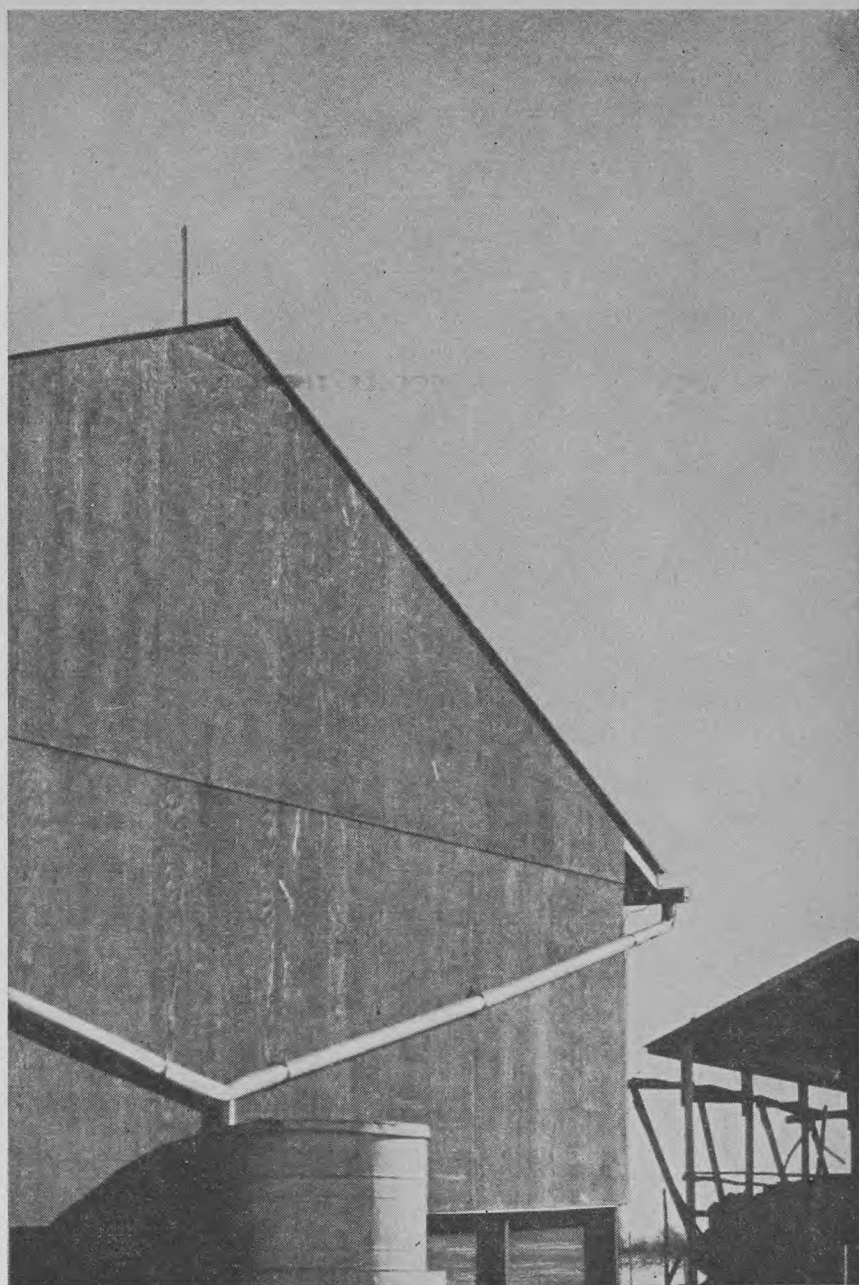
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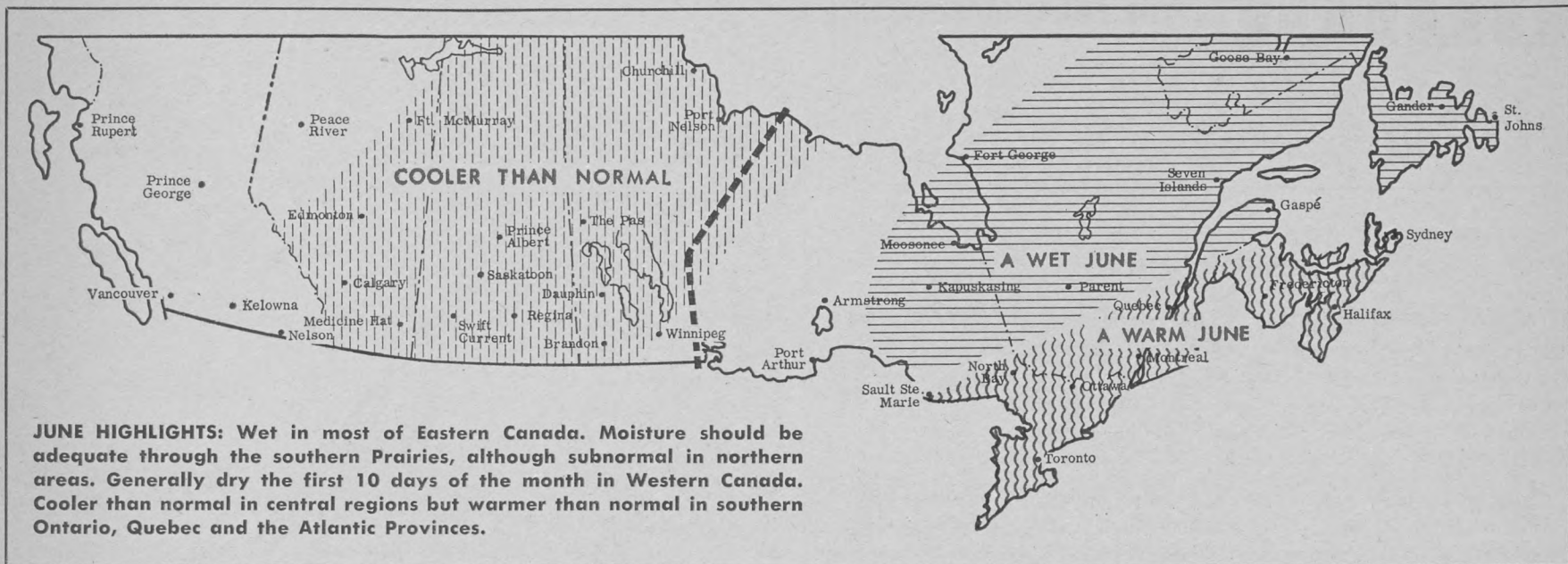
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Look for the edge-mark





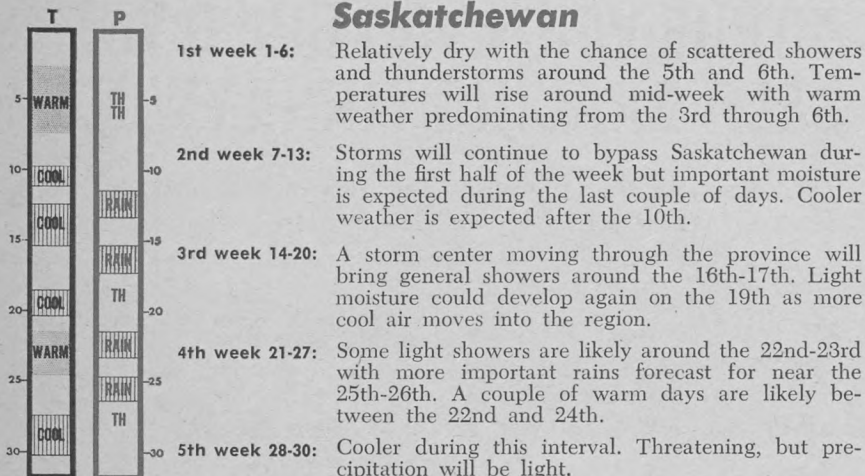
JUNE 1964

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—Ed.)

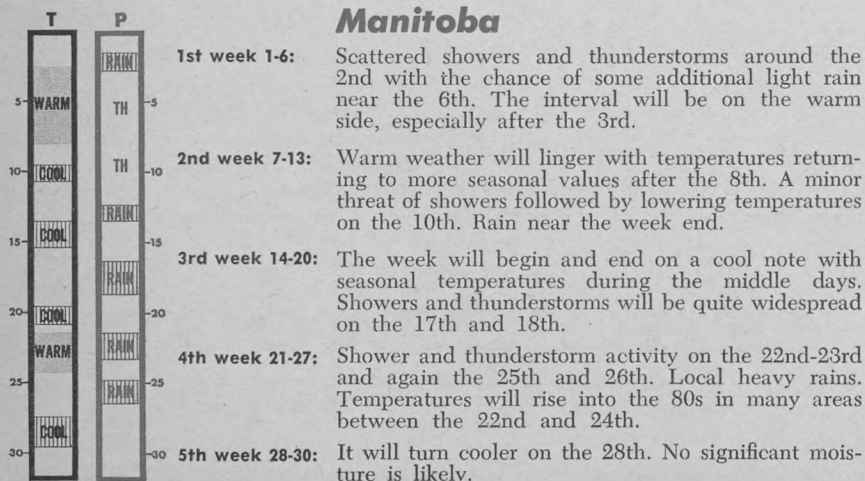
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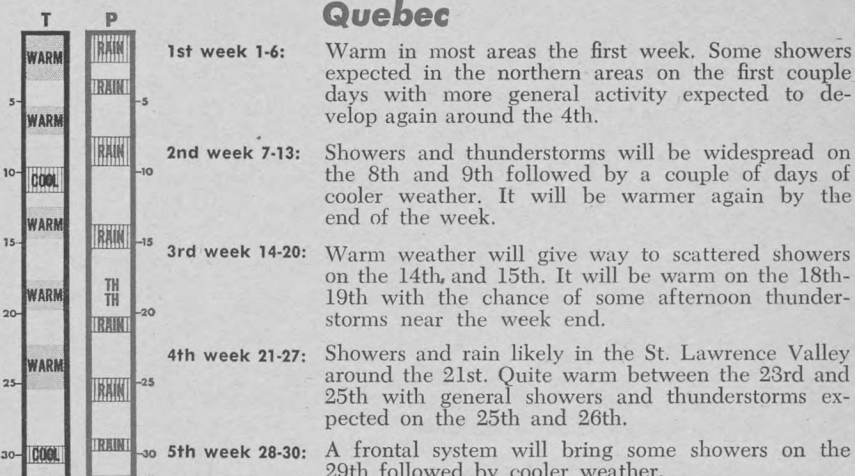
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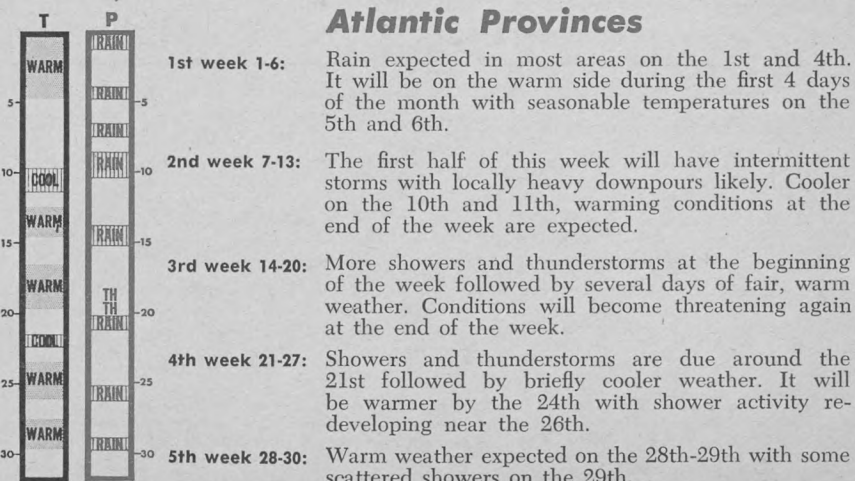
Ontario



Quebec



Atlantic Provinces



Key to Abbreviations: T, temperature; P, precipitation; CL, cooler; WM, warmer; TH, threatening; SH, showers; R-S, rain or snow.

Editorials

Farmers and Research

IN A WELL-DOCUMENTED article in last month's issue of Country Guide, Dr. Jim Marshall charged that farm research is in trouble in this country. He claims that the pendulum has swung too far in favor of pure research at the expense of the practical or applied research that could be of more immediate benefit to farmers. Warning that farmers have lost touch with the kind of research that is being done, he predicts that the penalty will be paid by Canadian agriculture and by individual farmers.

In an eloquent plea that agricultural research be brought back to serve the interests of Canadian farmers, he implied that it is time to call a halt when scientists, many of whom were neither raised on farms nor have come to know agriculture and its problems, control the research work being done.

Now it appears that Dr. Marshall is not a voice crying in the wilderness. While his view is not the popular one in many circles today, certainly the reaction to his article in last month's issue of the Guide is a heartening one from the point of view of farmers. Several letters have arrived on our desk from scientists within government branches who fully endorse Dr. Marshall's views. Stated one correspondent: "Many scientists were raised on the farm and agree 100 per cent with Dr. Marshall." Meanwhile, a University of Toronto engineer-

ing professor voiced alarm about the same situation. He said that pure scientists are gaining too much influence in our society, even though the need now is for more applied research and development. The problem has become of such concern to Ontario agriculturists that, at the recent annual convention of the Ontario Institute of Agrologists, the matter was discussed at length.

The time seems ripe to question the "publish or perish" system. Under this system government research workers gain promotions on the basis of the number of papers published regardless of their value to farmers.

We believe the corrections suggested by Dr. Marshall can be achieved if farm people and the public bring their influence to bear on the situation. For this reason it is well to look at Dr. Marshall's qualifications. He recently retired from his post as Officer-in-Charge of the Federal Entomological Laboratory at Summerland, B.C. His retirement puts him in a position to vigorously protest the weaknesses in government research institutions. He speaks from experience. He was a key figure when applied research was brought to bear on a number of problems that had confronted British Columbia fruit growers over the years. He was one of a number of Canada Department of Agriculture scientists who helped to develop an airblast spraying program

which has saved fruit growers millions of dollars in recent years. He was one of the scientists concerned with the development of the bulk handling technique for fruit. It, too, was adopted with tremendous savings to fruit growers. Now about 90 per cent of the B.C. apple and pear crop is harvested in half-ton bins which are handled by hydraulic lifts.

While Dr. Marshall's experience bears particularly on the fruit industry, the point he makes concerns every phase of agriculture. The applied research to which he refers has had a bearing on many agricultural developments in the past. Cattlemen can think of artificial insemination. The technique of freezing and storing semen may have been developed in a laboratory, but not until it was adapted for use on farms did it prove to be the boon that it has become. Prairie farmers will remember the work of the plant breeders who produced the rust-resistant wheats upon which the prairie grain economy is based. Farmers everywhere can think of how chemical herbicides were developed and adapted for farm use.

In the question of where to put the emphasis—on pure research or on applied research—Country Guide can do no more than endorse Dr. Marshall's views. Research scientists working for commercial firms such as feed, farm machinery and agricultural chemical companies must stay alert to the needs and demands of farmers. Farmers will buy their products, and so they must serve the farmer. However, in government service the farmer has less influence over the way his money is spent. Only as farmers remain watchful, and demand that research scientists answer for their work, will they get the full benefit of the moneys that are being spent on their behalf. V

Crossroads for Chemicals

RACHEL CARSON, author of the controversial best seller "Silent Spring," died of cancer last month at the age of 56. Miss Carson, who was a biologist with the U.S. Fish and Wildlife Service, became widely known in the postwar years for her naturalist books. "Silent Spring," which appeared in 1962, was in a different vein to her earlier books—it was a combination of documentary evidence and emotional appeal against excessive and indiscriminate uses of pesticides.

Her charges possessed a hard core of truth. If the case was overstated, as outraged spokesmen for the chemical industry protested, this was also probably true. Still, it was necessary to achieve the desired impact. Her charges found a responsive chord in those people around the world who were disturbed at the implications of an era controlled and manipulated by chemicals. However, if it is true that pesticides have been misused, it is equally true that their use has confounded the prophets of doom and starvation who followed in the gloomy footsteps of Thomas Malthus. Malthus saw poverty and distress as the inevitable result of population increases. Yet agriculture in the developed countries is meeting the population explosion with an increased productivity that is due, in large measure, to the use of chemicals.

Insecticides, for example, are used to control some 3,000 species of insects today; fungicides control an equally serious threat; control of weeds, rodents and nematodes all rest on chemicals and good management; chemical feed additives, growth promoters and antibiotics have provided the basis for a revolutionary poultry industry; swine and cattle are becoming increasingly dependent on the success of the research chemist. Pesticide sales in Canada alone will amount to some forty million dollars in 1964. The list is endless, the implications staggering. Are we, as Miss Carson suggested, poisoning wildlife? And are we on the way to poisoning ourselves?

There will be a lasting monument to Miss Carson, which will outlive the current controversy. It will be increased vigilance in the licensing of chemicals; awareness of the interaction of certain chemicals; growing understanding of the awesome power of new chemicals (one recently released for brush control is harmful to soybeans when used in dilution of a few parts per million); and stricter control over custom applicators (effective January 1, in the State of Iowa applicators had to be licensed). In addition, there will be renewed emphasis on biological control, a control that will become more and more effective as it is continued, even as the race between resistant strains and new chemicals remains unending. In fact, the fight against pestilence and disease will be a compromise between chemical and biological control.

Dr. G. S. Cooper, of Cynamid of Canada, Ltd., in addressing the Ontario Institute of Agrologists, observed: "In our time, agricultural science has turned the point in man's long and generally futile struggle against hunger and want. Chemicals will play an ever-increasing role in man's effort to provide sufficient food, fiber and shelter."

No farmer would wish to struggle in an environment favorable to insects and disease. No one would wish to live in the sterile world envisaged by Miss Carson. We have a wonderful and terrible arsenal and the world we enjoy will, in large measure, be determined by the enlightened use of that arsenal. V

Swine Industry Blueprint

THE CANADIAN SWINE INDUSTRY has taken the first step toward a long-term goal of self-improvement. Vehicle for this move was the Hog Improvement Conference which was convened in Montreal in late April. It was a unique and ambitious undertaking for both the industry and the sponsor of the Conference, the Canadian Federation of Agriculture.

In itself, the Conference will not produce one more grade "A" hog or answer any of the

multitude of questions relating to research, management and breeding. What it did accomplish was to build the general framework in which the industry, and its many components, can advance. As with the broad concepts of ARDA, results will depend upon the enthusiasm and constructive action delegates and observers are able to engender within their breed and producer organizations. Giving priority to national, rather than parochial interests, will entail some sacrifice of autonomy.

There was uniform agreement at the Conference on the need to establish a Canadian Hog Producers' Advisory Board, comparable to the British Pig Industry Development Association; there was compromise agreement on just how this should be accomplished. It will be done in stages with voting delegates to the Conference acting as a provisional committee "charged with ensuring establishment of provincial organizations, with the help of producer groups concerned." A further conference is to be called next year to co-ordinate the views of the provinces and to establish the Advisory Board of which at least 75 per cent of the members will be hog producers.

If the wealth of ideas expressed at the Conference find fertile ground in the provinces, then the swine industry may well change dramatically:

- There will be high and uniform standards for elite herds and these herds will provide breeding stock.
- Registration of breeding stock will depend upon proof of performance.
- Hog farmers will put up money to stimulate research in a self-help program.
- An additional premium grade for hog carcasses will be established.
- War will be declared on the scrub boar and on diseases which sap profits.

"We have a great objective," said J. M. Bentley, CFA president and co-chairman of the Conference. "Let us achieve this in the coming year. V

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CASE 700—Bigger multi-crop capacity at a price you can afford. Big 40" cylinder and 4,640 sq. in. separating area easily handle 100 bushels per acre of corn and heavy-yielding crops of grain, beans and seed. 55 bu. grain bin.



CASE 600—Unsurpassed for all crop harvesting. With its 13 ft. header and 40" straight through threshing, cleaning and separating operation the 600 works faster than other more expensive machines.



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PROVINCE.....

DAIRY OUTLOOK is best in years. Canadian production and consumption in 1963 about balanced. Continuation of consumer subsidy announced by Government means consumption should continue at about the higher level of 1963. At same time world market for cheese and some processed milk products shows improvement as result of smaller world production of milk last year.

TURKEY PRICES for heavy birds at least are higher and should remain so. Hatchings of heavy types down from last year in Canada, though American production up. American supplies will act as a brake on price increases but outlook is still for improved returns over 1963 for Canadian producers.

CHICKEN BROILERS should be popular for the barbecues this summer as prices are down and hatchery figures indicate supplies will continue to run 15 to 20 per cent over last year's record output. This trend is good for consumers but producer-profits will be pared to the bone.

EGG SUPPLIES will continue to run well ahead of last year until late fall at least. Hatch of replacement pullets during first quarter was well up, but started to fall behind 1963 as second quarter opened. This will not affect supplies before October. Egg prices will show little improvement.

LAMB PRICES are rising but will generally run a dollar or more below same time last year until at least July.

VEAL CALF MARKETINGS will continue heavy, particularly in the East for at least another month. Prices will likely drop gradually by another dollar or so and then level off for the summer.

CANADIAN HOG NUMBERS continue to show increase over 1963 with farrowings, December to May, up 10 per cent. This means heavy marketings until close to year-end. Reduced American production promises continued support for our market and prices for the summer will be higher though not so high as last year.

GOOD AND CHOICE SLAUGHTER CATTLE PRICES should hold around present levels despite higher marketings. Increased Canadian consumption and normal summer demand for better cuts of top quality beef should look after these supplies. However, little prospect of moving any surplus across the line as American supplies also large.

News Highlights

A deficiency payment of 14.3 cents per lb. will be made by the federal government on the 1963-64 wool clip. This is the difference between the support price of 60 cents per lb. and the average price received by producers, basis Toronto.

An independent fat stock and meat marketing authority for Britain has been proposed by a special study committee which was formed after the collapse of cattle prices in 1961.

The turkey industry is finding export markets for its product. The Ontario Turkey Association reports that well over half a million pounds of turkey were exported in 1963 compared to 20,000 lb. in 1962. The Association recently voted a further \$7,000 to continue its turkey promotion program.

Ontario's participation in Britain's ideal home show in London recently is reported to have been very successful. Sales of Ontario-grown food products like cheese, chicken, pickles, canned fruits and juices were made to 100,000 people. In addition, samples of these products were distributed to 200,000 visitors.

The feed mill which is to be built as a part of the beef cattle research station which is being established at the University of Saskatchewan, Saskatoon, is expected to be completed by mid-September. It is being

designed to process feed by several different methods including steam rolling, dry rolling, hammer milling and pelleting.

Mr. Doug Parks, who has been director of the Soils and Crops Branch of the Ontario Department of Agriculture, has been appointed director of Extension. He takes over from E. I. McLoughry who is retiring following 42 years of service with the department. Mr. W. W. Snow who has been chief instructor and extension specialist at the Western Ontario Agricultural School, Ridgetown, will succeed Mr. Parks as director of the Soils and Crops Branch.

The Australian government is planning to introduce legislation which will help to diversify and expand markets for Australian meat products. The legislation will provide for the introduction of a levy on all cattle over 200 pounds dressed weight, slaughtered for human consumption, as well as on sheep and lambs. The money will be used by the Australian Meat Board to finance additional meat promotion activities in domestic and foreign markets.

A wheat and cotton bill, designed to give growers in the United States who limit their acreage of these crops higher price supports through the use of redeemable marketing certificates, has been passed by a

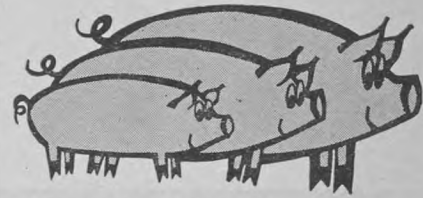
hectic session of the House in Washington. The new wheat program is a voluntary control plan under which farmers who decide to comply with their 1964 allotments will qualify for price supports and acreage diversion payments. This is intended to head off a predicted 600-million-dollar drop in farm income this year.

The Farm Credit Corporation has announced that, for the first time in the history of the lending institution, loans exceeded \$100,000,000 in a fiscal year. In the fiscal year ended March 31, 1964, 8,689 loans amounting to \$108,009,000 were approved. This is an increase of 16.8 per cent over a year ago.

TO PROMOTE APPLES

Ontario apple growers have voted to go all out on a promotional and advertising program aimed at boosting consumption of apples and apple products. In an April plebiscite the growers voted 69 per cent in favor of the promotional program which they will pay for with a compulsory levy.

The plan will be set up under the provisions of the Ontario Farm Products Marketing Act and will be under the supervision of the Ontario Farm Products Marketing Board. Unlike all other plans set up under the Marketing Act, this one



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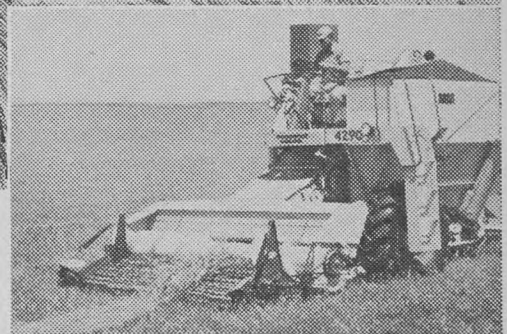


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MINNEAPOLIS-MOLINE OF CANADA, LIMITED, REGINA, SASK.

NEWS HIGHLIGHTS—Continued

will have absolutely no sales or marketing features. The only things which the vote authorizes are advertising, promotion and research aimed at boosting the sales of apples and apple products.

The procedure in taking the vote also differed from previous votes held under the Act. In this case the balloting was done at a series of local meetings held in all the main apple growing sections of the province. In previous votes under the Act, balloting was done on a specified day just as in an election. At

each of the special meetings held for taking the apple vote, there was someone present to explain the proposals, and growers were allowed plenty of opportunity to discuss the regulations to be introduced under the plan.

Finally, at the conclusion of the meeting all growers present were able to vote by secret ballot to indicate whether or not they approved the proposed plan. The fruit and vegetable extension fieldman or the agricultural representative in each area acted as returning officer. He

returned all marked ballots to the Ontario Farm Products Marketing Board and none were opened until after all the meetings had been held. Later, the ballots were counted by the Marketing Board in the presence of representatives of the Apple Section of the Ontario Fruit and Vegetable Growers' Association.

Under the plan, which the growers approved, the advertising and promotional program will be administered by the Apple Section of the Ontario Fruit and Vegetable Growers' Association. It is proposed that the money raised may be spent in direct advertising, in providing

special advertising banners and displays, in preparing news releases for food editors and commentators, in research on new processed products and packages, and other similar projects.—S.J.C. V

VOLUNTARY HOG MARKETING FOR MANITOBA

A new Natural Products Marketing Act designed to meet criticisms which had been leveled at the previous Act and to provide a more acceptable approach to the orderly marketing of farm products, has been passed by the Manitoba Legislature. Under the new Act, the Manitoba Marketing Board will be given more specific powers and duties in holding plebiscites among producers prior to establishing any producer board. It will also have power to supervise marketing schemes, and to inspect and enforce marketing programs. It will supervise the work of producer boards set up and operated by the producers themselves, and of marketing commissions which are a public utility type of commission with publicly appointed members.

Minister of Agriculture the Hon. George Hutton has announced that a voluntary teletype hog marketing system which was recommended by the Shewman Commission on Livestock Marketing and approved by the legislature, will be initiated this year. It will be operated by a marketing commission. Hog producers in the province will have 2 to 3 years experience with this system before deciding by vote what future form of marketing should operate in the province. V

RE-EXAMINE WHEAT GRADING

Board of Grain Commissioners' chief, F. F. Hamilton, says that Canada's leadership in the grading of wheat is diminishing and the value of our grade certificates, in relation to buyers' requirements, may be seriously challenged when Canada is again selling on a buyers' market.

Speaking to members of Manitoba farm business groups, he stated: "Unless we make a critical examination of this grading system of ours, which has served us so well in the past, we may find it has been outmoded by changing conditions throughout the world; that it is more of a hindrance than a help in selling our wheat. Our grading system is doubtless the most difficult and intricate of all our problem areas. It presents the key problem; the one that interlocks with every phase of grain handling and merchandising."

He gave as reasons for the need for re-examination of Canada's grading system:

- Canada's competitors are improving their grading or quality control.
- Automation in European mills and the increase in "ready-mix" products at home and overseas require quality control of all ingredients, including flour. V

HOG RESEARCH FARM

A swine research operation which is said to be the largest in Canada has been opened by Shur-Gain Feeds Limited at Maple, Ont. The center has been designed so that tests can be conducted on feeding, manage-

It would be great if it started to whistle after 250 hours of use

It would be great if a worn tractor spark plug would signal when it started costing you time and money. But it doesn't!

Your tractor can be wasting power and fuel without any sign of trouble. Here's why—an accumulation of fouling deposits plus normal electrode wear can cause a plug to misfire. This hidden misfiring usually starts after about 250 hours of use. It's difficult for even a trained mechanic to detect, but it can waste a gallon of fuel every four

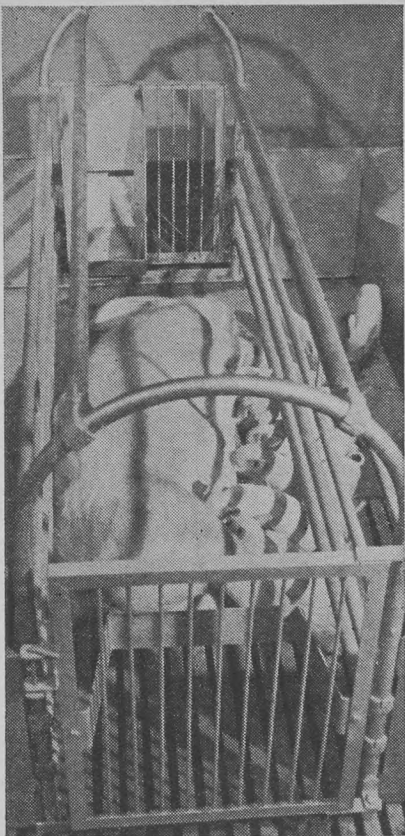
hours... about eight cents out of every dollar you spend on fuel on the average.

What can you do about it? Tractor experts advise changing plugs every 250 hours... that's about every six months for the average tractor. If you're still running on the plugs that carried you through last year's harvest, take a tip from the experts and install new silvery-plated Champions now. They'll more than pay for themselves in fuel savings.



CHAMPION SPARK PLUG
COMPANY OF CANADA, LIMITED
WINDSOR, ONTARIO

CHAMPIONS—FIRST CHOICE OF TRACTOR MANUFACTURERS



[Ragsdale Photo]

Farrowing crates are installed over partially slatted floor in new barn

ment and sanitation practices. The company is seeking meaningful answers to the problems of commercial-sized hog operations. Findings of the research projects will be made available to all segments of the Canadian swine industry.

The unit consists of three buildings — a dry sow barn, a farrowing and nursery barn, and a finishing barn. Many new management ideas

are being tried. For instance, sows will be tied with leather straps in an arrangement similar to dairy stanchions. A limited floor feeding system for market hogs will be utilized. The herd is specific pathogen free. v

CANADA-U.K. CEREALS AGREEMENT

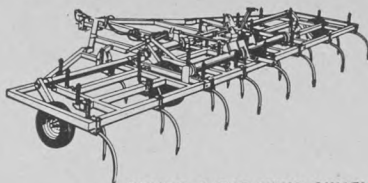
The Honorable Mitchell Sharp, Minister of Trade and Commerce, has announced that Canada and the United Kingdom have reached an agreement respecting world trade in cereals. Other co-operating governments are also involved. Mr. Sharp stated that the objectives agreed upon are that the world market for cereals should be improved. This would be brought about through a better and more economic balance between world supplies and commercial demand.

Under the arrangements, the British will seek to discourage the growth of domestic cereal production above a level consistent with their stated objectives. They will do this by limiting financial assistance to producers. In addition, a system of minimum import prices is to be applied to prevent U.K. prices from falling to very low levels. This would limit the amount of the deficiency payment which would otherwise be payable to producers.

Mr. Sharp also announced that the negotiations are being carried on under GATT auspices in the context of the forthcoming Kennedy round of trade negotiations, for a comprehensive world grains agreement. Canada will be co-operating closely in the pursuit of a long-term international cereals agreement. v

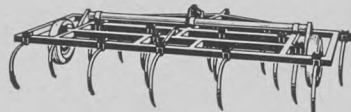
KRAUSE TILLAGE TOOLS

PERFORMANCE PROVEN IN CANADA



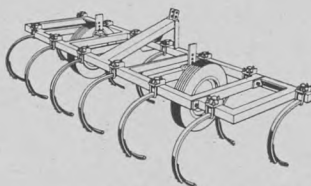
KRAUSE 4/BAR WING CHISELS

8,000 pounds of working weight in the biggest, strongest chisel with unmatched trash clearance. Five models. 18' to 34' widths.



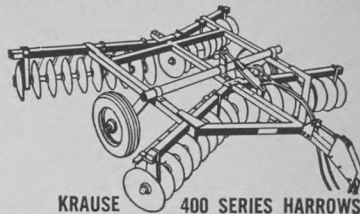
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Patented 4-Bar construction for maximum clearance in a rigid chisel. Easily handles toughest field conditions. Twelve models. 9' to 21' widths.



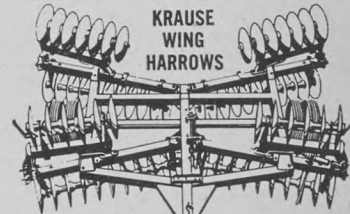
KRAUSE LIFT-UP CHISELS

Stronger, wider, higher clearance for 3-point hitch tractors. New hitch permits easy change-over for Category I or II. Five to 13 shanks with extensions.



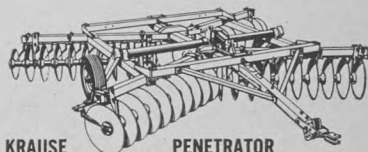
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Four rows folded — six rows extended. Spring lifts and simple locking devices on wings for fast, easy conversion. Six models. 19'-3" to 20'-11" widths.



KRAUSE DOUBLE-DUTY TANDEM-DISC PLOW

The TWO-IN-ONE tool that penetrates the toughest trash and soil yet has light draft for shallow tilling. Seven models. 9'-6" to 16'-7" widths.

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PAGE FROM CROWN'S
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see us for the
FARM BUILDING INFORMATION YOU NEED

AIDS TO AGRICULTURE is the most comprehensive volume of ideas, specific designs and advice on farm building and equipment ever assembled in Canada. Only your Crown Lumberman has it and, with it, he is equipped to give you fast, accurate advice and estimates on whatever building project you may have in mind.

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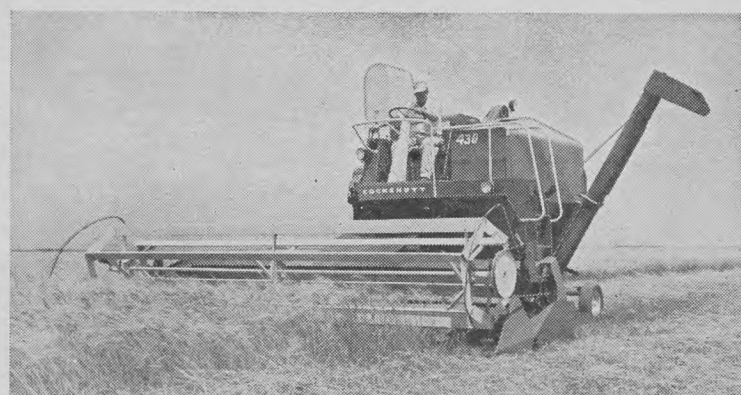
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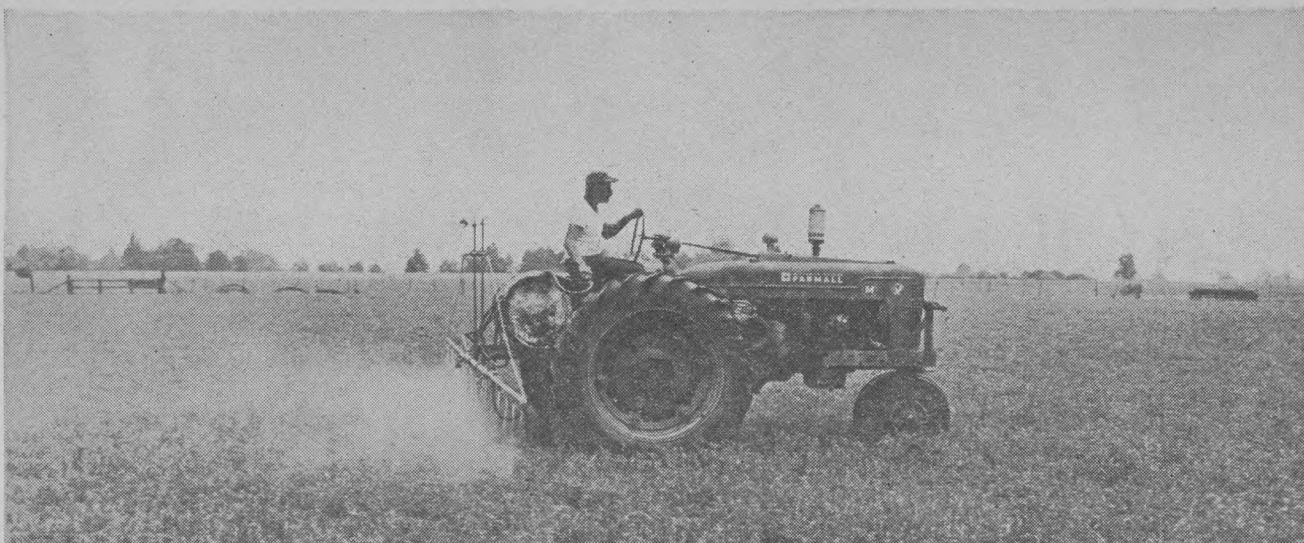


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This low-pressure sprayer gives good weevil control in alfalfa. Loss from drift is minimized

We Couldn't Get Along without Them

by **CLIFF FAULKNER**
Field Editor

Agricultural chemicals can be a friend in need if you take the trouble to use them properly

EVER SINCE THE DISCOVERY of fire, flames have ravaged towns, forests and grasslands. It has slaughtered countless thousands of people, leveled cities and destroyed all wildlife over vast acreages. Streams have dried up so that all the fish perished. Handled carelessly, fire is destructive and wasteful, yet where would we be without it? The same could be said of chemical pesticides.

Let's just take a look at what would happen if we did away with them entirely. It has been estimated that about one-third of Canada's people would have to get along without food if we got rid of all chemicals used in food production. Although this would be easy on the pocketbooks of those concerned it would be rough on their longevity. Most of the remaining two-thirds would find themselves in the same fix because food prices would be so high only the wealthy could afford to eat. In fact, agronomists figure that about 80 of the world's most common food crops couldn't be produced economically without the use of pesticides.

Perhaps the biggest contribution agricultural chemicals have made is to keep production costs down. Chemical weed control has increased the value of farm pasture lands by at least 25 per cent. It has decreased farm weeding costs by as much as 50 per cent. Agricultural scientists estimate that a gallon of certain weedicides will kill more weeds in one application than 7 men working with 7 hoes for 7 years.

Henry Penner, who farms near Coaldale, Alta., saved a 20-acre crop of canning peas that had become infested with wild oats by a timely treatment of selective herbicide. It was impossible to cultivate for weeds because he had sown the crop broadcast with a seed drill. "If we hadn't been able to spray, we would've had to kiss that crop good-bye," he said.

One year, Dwight Perry, Chin, Alta., had a 100-acre mustard crop destroyed by flea beetles. Before sowing his crop next year he treated the mustard seed with a chemical dressing. When the new crop came up the beetles left it strictly alone. In Saskatchewan, Bernie Boyle of Kinistino

saved a rape crop from flea beetles by using one-half ounce of chemical seed dressing per pound of seed. The treatment cost him about 65 cents per acre to protect a crop worth about \$60 an acre from almost certain destruction. Harry Radke, Melfort, Sask., also treated his rapeseed to protect the crop from flea beetles.

"But the greatest hazard to rape is worm and moth infestations just before harvesting," he said. "These can only be controlled by spraying. If I use ground-type spray equipment, the cost is about 50 cents an acre. If I use aircraft, the cost is from \$1.25 to \$2 an acre. But without these spray treatments the cash value of my crop would be reduced by 75 per cent."

Fred Schneider, who farms at Eston, Sask., would have had to plow two fields of weed-infested wheat under if he hadn't been able to get in there with an emergency spray treatment. In one case it was wild oats in a crop of durum wheat, in the other it was an infestation of tartary buckwheat.

"To clean up the buckwheat I used 7 oz. of herbicide per acre (in 5 gallons of water), and gave the crop two applications 2 weeks apart," he said. "There wouldn't have been a crop at all without this heavy treatment."

Through an error in adjusting a new seed drill, another Saskatchewan farmer found he had sown his durum wheat at only about a bushel per acre. When the crop came up, the spaces between the wheat plants were filled with wild oats. Instead of writing the crop off as a dead loss, the farmer sprayed for wild oats and later harvested an average of 33 bushels of durum per acre.

In Eastern Canada, a leading entomologist has stated that without the use of agricultural chemicals blight could wipe out the Prince Edward Island potato crop, or the tomato crop in southern Ontario. Downy mildew could end the production of lima beans, and brown rot could wipe out the Niagara Peninsula's peach crop. Both the quality and quantity of grapes, strawberries and other small fruits would drop, and what remained would

be priced out of the market. Without poisons to protect pastures from grasshoppers, ranchers would often be forced to sell their cattle at unfavorable times. Producing quality milk would be impossible without chemical fly control.

If we did away with chemical pesticides few farms today could operate at a profit. That's why it is vitally important that you learn to handle these dangerous materials carefully. Your health, your crops and even your markets can be adversely affected. It is very important that you use the right chemical for the job, apply it properly, at the right time, and follow the handling instructions on the label. For some chemicals, protective clothing is as necessary as an asbestos suit in a flaming building.

Some time ago I stopped to talk to a farmer who had been spraying a grain crop. He was covered from head to foot with the stuff, even his eyebrows were moist with it. He told me he hadn't been feeling too well lately. I said that sprays and dusts often made a person feel a bit tacky. A man should really wear a mask, he agreed, but the thing felt so uncomfortable.

You can make your crop feel pretty uncomfortable too, if you spray at the wrong growth stage, or spread the chemical unevenly. The result is generally a poor yield, or sometimes no crop at all.

About the worst thing you can do is to handle pesticides so carelessly that traces appear in the products you market. If the Food and Drug people find some poisons in your products they can put you right out of business. Spraying a restricted chemical on, or near, a forage crop can be far more disastrous than tossing a lighted match in a hay barn. In some cases it has caused authorities to take a valuable chemical right off the market.

Dean Fred Bentley of the University of Alberta put the whole thing in a nutshell when he said, "The public must show a greater sense of responsibility and intelligence when using these chemicals. The alternative will be tighter regulations which might ultimately mean that everybody will have to have a license to apply pesticides." V

Fat Bulls -Thin Wallets

Field Editor Peter Lewington charges that hot feeds and hotter pedigrees appear to count for more than proof of performance in selling purebred beef cattle today

I'M NEW IN THE beef business and very disillusioned by what I find posing as breed improvement. It has been said that a newcomer can evaluate new surroundings after a few hours; after that he has to wait many years for a mature judgment. I can't wait that long; the arteries will harden and I may well become a slave to the ultra-conservatism which pervades beef breeding. The outdated standards of the "fat" stock show ring and the repetitive use of the worn-out clichés of the breeder's vocabulary may wear me down.

A great deal has been said over the years about conformation of beef cattle. Does the beef breeder also have to be a conformer? Does he have to perpetuate old prejudices in his own breeding program? "The beef breeder and feeder," says Dr. Tom Burgess of OAC, "demand to be deceived!" One year ago I would have discounted this; now I'm appalled by it. The buyer will often pay a hefty premium for the overfitted beast, even though he knows that the fat may conceal weaknesses in conformation.

When the demands of writing made it increasingly difficult to maintain a dairy herd, I held a dispersal sale. The cattle sold well, but not just because they looked attractive and were bred on schedule. There was some solid documentary evidence to help establish their worth. No female had been purchased since the herd was formed and the continuity of cow families could be seen. Most of the bulls used could be judged by the performance of their progeny; the cows were graded for type; production was recorded and the records (all records not just the best as is the case in some beef sales) were available. The herd was on the mastitis control program and the udders were as healthy as it was humanly possible to maintain them.

My transition from dairyman to beefman was, in large measure, a move from fact to fads and fantasy. Beef breeding stock with "hot" pedigrees—but not a shred of proof of performance anywhere in their background—sell like money was going out of style. The bull, hand fed on steamed beans and other goodies, finds a ready market as a herd sire. "Ah!" say the breeders when questioned about all that nice curly hair and wasteful fat, "look what they hide!" Even beef cattle with dwarf characteristics get peddled as bona fide breeding stock.

These criticisms are not meant to discount the good work of the provincial, federal and international endeavors currently being made in beef improvement; these are heroic efforts made in the face of monumental indifference and they are an attempt to close the gap in performance testing. More and better beef evaluation is necessary and better use has to be made of what is already known.

Beef testing is just half a century behind the dairy industry in factual improvement. Recently we have seen some results of beef progeny testing. Following careful carcass evaluation, a handful of superior beef sides have been found.

Hallelujah! Qualified meat sires have been found. In any enlightened segment of agriculture such superior sires would go on to reproduce yet more desirable sires for future generations. Such will not be the case! Artificial insemination contravenes the rules of some breed societies. No matter if these superior sires are used to breed the finest cow families in Canada, the best they can do is produce commercial cattle. It is a tragedy that, once the best bulls are identified, they cannot be used for breed improvement.

Breeding stock which combine appearance, pedigree and progeny performance are essential today. If the commercial breeder does not get the caliber of cattle which makes him money, he will be driven to crossbreeding, and in this he will find support from many geneticists. If the commercial man wants to stay within a breed and fails to obtain the bulls he wants from purebred breeders, then he will turn to his own resources of progeny testing and selection. In any event, crossbreeding, if it is to have much prospect of success in developing better cattle, must rely upon two desirable strains to start with.

This is a dynamic era of change in farming, but this would be hard to discern by looking at some segments of the beef industry. Where is the pedigree poultry breeder of yesterday? He now holds a minority perch in the shows for novelty fanciers.

Commercial broiler and egg producers enthusiastically embraced scientific breeding and selection of breeding stock on performance. They watch feed conversion figures and the end result is that the consumer gets high quality food at fiercely competitive prices. As a result, the poultryman has taken a more significant place in the consumer's shopping basket. The swine industry is exploring all promising advances in feeding and

breeding and carcass evaluation in order to carve itself a more generous slice of the consumer dollar—it is poised for spectacular advances such as those which have transformed the poultry industry.

Carcass studies of progeny of long-bodied beef sires have shown they yield the sort of beef wanted in the market place. The blocky, compact, box-like beast is found to be a fraud under the harsh spotlight of carcass evaluation. The ideal is rate and efficiency of gain, coupled with carcass quality.

George Rodanz, who has been a member of the Board of the Ontario Beef Performance Association since its inception in 1950, has bred cattle renowned for their desirable size, length and quality. He says, "We purebred breeders have to develop cattle the feedlot operator wants. Commercial cattle are the backbone of the beef industry."

Rodanz, who is also active in Performance Registry International (PRI), urges the testing of both males and females. This assists in informed culling. Weaning weights show up the poorest milking cows. Curiously, many breeders discount the role of the cow in herd improvement and rely exclusively upon the bull for herd improvement and stimulating sales of breeding stock.

For the livestock breeder, the gains to weaning age are the most significant. A set of scales is required to identify the fast-growing calves and their dams.

"Eliminating the poor producers is the most effective way of improving the herd," says Dr. Burgess. "Get rid of the bottom 20 per cent in a 50-cow herd and replace them with cows comparable to the top 20 per cent of the herd. Then you should have an extra half ton of beef to sell at the end of a year."

Size of the herd sire is important, but it is also important to differentiate between size and weight. Over-fat bulls, grown on uneconomic rations, won't lead the way to breed improvement. There appear to be more feeders than breeders in the ranks of the purebred man.

Ross Beattie of Stayner says, "Too much attention has been paid to show ring terms of blockiness and smoothness. We need the natural fleshing type of cattle which will go to market earlier; the kind of cattle that can gain 3 lb. daily and put on a pound of beef for 6 to 7 lb. of high energy feed."

The mere weight of a bull is not an adequate measure of his genetic worth. One artificial breeding unit is now sufficiently discouraged with the breeding efficiency of "ficticiously fed" bulls that it is growing out its own young potential sires. "The faster gainers," says Dr. Burgess, "are not the fattest bulls on test. There has to be a balance



A beautiful coat and a noble pedigree are unsullied by performance testing

[Guide photos]

What the Critics Say

D. W. Zinn, *Texas Technological College:*

• "We have all heard the statement, 'The Steer of Tomorrow Is Here Today.' This implies to the average layman that a majority of our cattle are of the 'meat-type.' This I do not believe for one minute. In fact I seriously doubt that 10 per cent of our total feedlot market steers today could qualify under the P.R.I. standards. Likewise, the implication made that the champion steer of our livestock shows is the ideal product of our breeders and feeders and of excellent marketability is utterly ridiculous. We are looking at these cattle with 'rose tinted' glasses when research and good old commonsense show the opposite is true. Almost without exception research shows that longer carcasses with less fat produce a higher percentage of the most desirable cuts and a lower percentage of the less desirable cuts. Why should we expect a long hog and a compact, blocky beef carcass to cut the same high yield? Even though the thicker beef carcass has eye appeal, the fact remains that the edible portion is not as great in this so-called 'typier' carcass as one which is angular and has more length. The reason is tied up in a simple 3-lettered word—FAT!"

H. T. Fredeen, *Experimental Farm, Lacombe, Alta.:*

• "Part of the responsibility for the stagnation in livestock improvement must rest with the purebred industry. Breed standards have been established, perhaps more frequently than we care to admit, by individuals whose livelihood has not depended on the productive performance of their stock or on the financial returns from their breeding operations. Breed societies are dominated by the philosophy that standards of color and form are of paramount importance and that pedigree as a guide to performance is superior to performance itself. Having lost their original missionary purpose, breed societies now concentrate their efforts on bookkeeping and shop-worn promotion."

R. A. Long, *University of Georgia:*

• "The mere fact that a breeder 'likes' a wasty, gutty, flat quartered counterfeit does not justify his existence. A breeder can, of course, make a collection of such cattle for his own personal enjoyment, but he should not expect to sell them to informed people whose goal is the efficient and profitable production of high quality beef."

J. C. Rennie, *OAC, Guelph:*

• "Beef cattle are lagging behind other livestock in efficiency and breed improvement."

between genetic capability and feed conversion. Unduly high levels of feeding after 14 months of age can impair a bull's reproductive capacity."

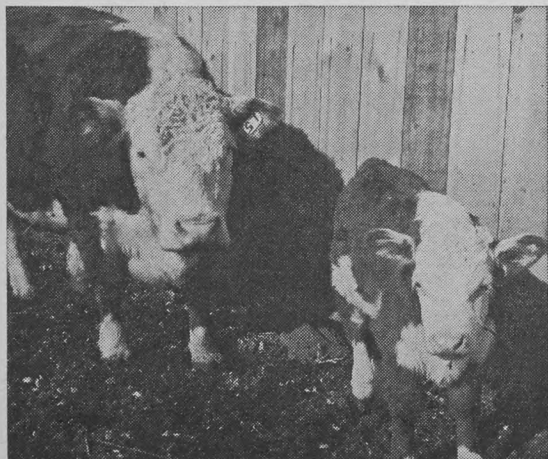
One A.I. unit spokesman explained the dilemma this way: "If we keep the bulls in good breeding condition, the visitors are disappointed. If we please them, then we can't get the cows settled."

During the test period a high level of feeding doesn't hurt. Differences in rate of gain can then be attributed to genetic differences. Overfitting in the months subsequent to testing may help place a bull in the shows or in an unwary buyer's herd; it may also impair his use as a sire.

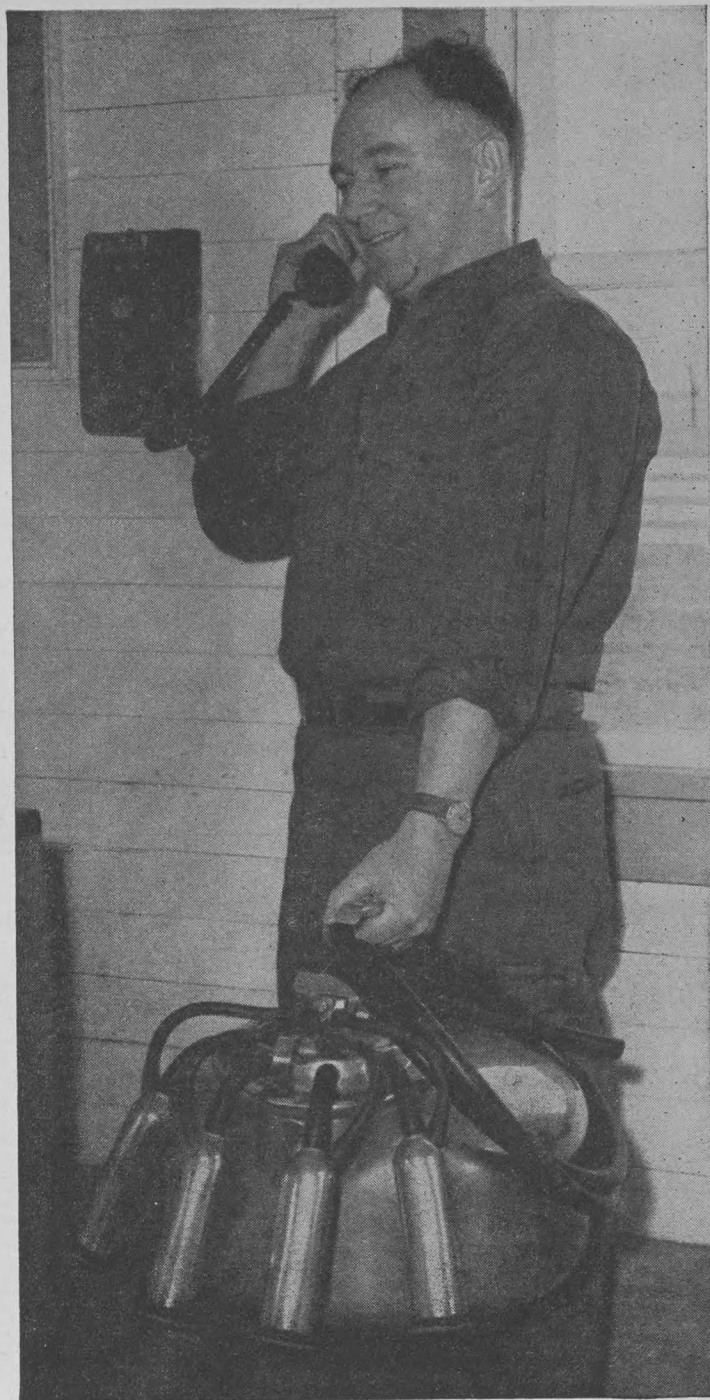
At present a nod from one man, provided of course he is judging in the show ring, will count for more

than all the breed performance data. Yet it is true that the herds with the most complete and desirable records are the ones which can contribute most to beef improvement. In the light of this it is a curious fact that breed associations make virtually no effort to present the evidence.

Yes, the beef breeder demands to be deceived—and he is. The feedlot operator, upon whom the purebred breeder must ultimately rely, cannot be deceived and stay in business for he has to sell on price, not prejudice. Now that the tools of enlightened breed improvement are available, how much longer can beef cattle demand a premium on the basis of high price 'way back in the misty recesses of their pedigree? How much longer a premium for hot pedigrees and hot feeds? V



The cow is half of any herd. There's no future for the cow that can't wean a calf



How much time would an extension phone save on your farm?

This farmer knows that his extension is saving him valuable time every day of the year.

Before he had an extension phone installed on his farm, he and his son were wasting about an hour a day hurrying from the barn to the house to handle telephone calls. Then the extension phone went in—and has saved them countless hours each year.

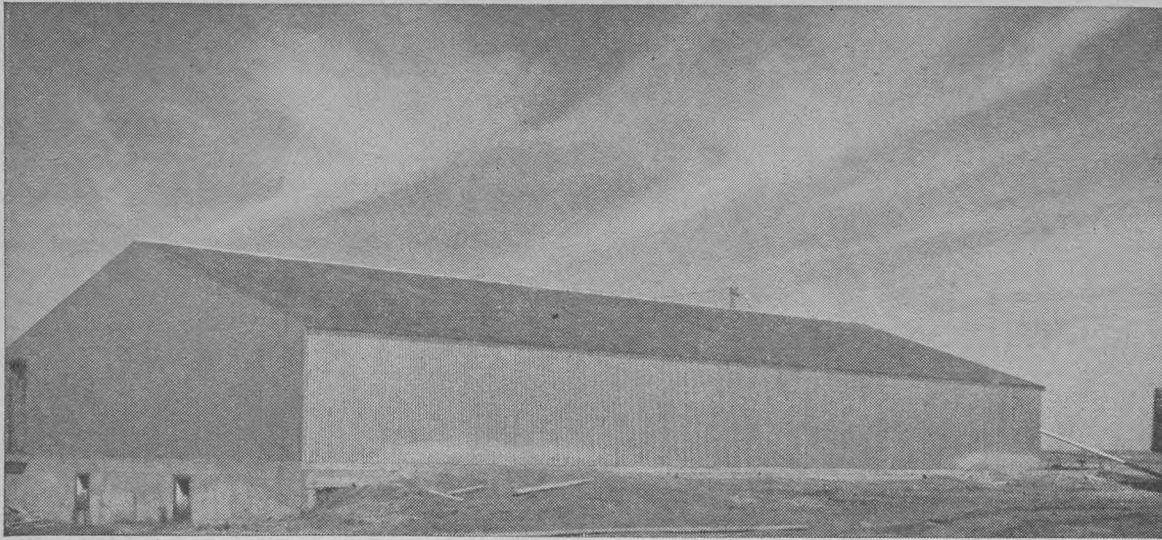
Doesn't it make sense to call your telephone company and tell them where to install your new extension phone?

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2064-4



Price's new steel and aluminum barn. Note the air outlets and shipping door at left. Doors are built at truck level

[Guide photos

Here is a . . .

New Hog Feeder Barn

✓ **Windowless** ✓ **Slat-floored** ✓ **Fully ventilated** ✓ **Partitioned with concrete**

PROOF THAT A HOG BARN doesn't have to smell like a hog barn can be found on the farm of Stan Price, near Acme, Alta. Stan, who raises purebred S.P.F. Landrace hogs and Herefords, has just built a new feeder barn that appears to be about the last word in this type of construction.

The barn is 84 ft. long and 40 ft. wide. It's a steel-framed, fiberglass-insulated structure with roof and walls of aluminum sheeting, both long-lasting materials which require no maintenance. The foundation and floors are concrete. Wood was used only in access doors, pen doors, and in four feed bins located at the front of the building.

Pigs are kept in two adjacent rows of 16 ft. by 4 ft. pens, each row containing 16 pens apiece. A unique feature of these pens is that partitions are made of precast concrete slabs. The slabs are held in place with welded angle iron. At the outside end of each pen is a movable plywood gate which can be used to move the pigs from one pen to another or to adjust the size of the pen to accommodate the animals as they grow in size. When the pigs are small the gate can be moved in so that pen length is reduced.

by CLIFF FAULKNER

Field Editor

"The idea here is that the front end of each pen — where the pigs do their feeding and bedding — is kept clean if the animals are slightly crowded," Stan Price told Country Guide. "This makes them move back and drop their manure in the cleaning area at the rear."

The "cleaning area" at the back of each pen is floored with pre-stressed concrete slats so that manure falls, or can be washed into a 70 ft. by 10 ft. concrete pit which underlies the whole pen battery. This pit was built to slope gently from front to rear at about the same pitch as a sewer ($\frac{1}{4}$ inch per foot) so the liquids and solids will flow down to the outlet located at the west end. Stan has extended the outlet pipe from the barn to a point where his land drops away so manure can be loaded directly into a tank and trucked out to his fields. Each pen also slopes in toward the center.

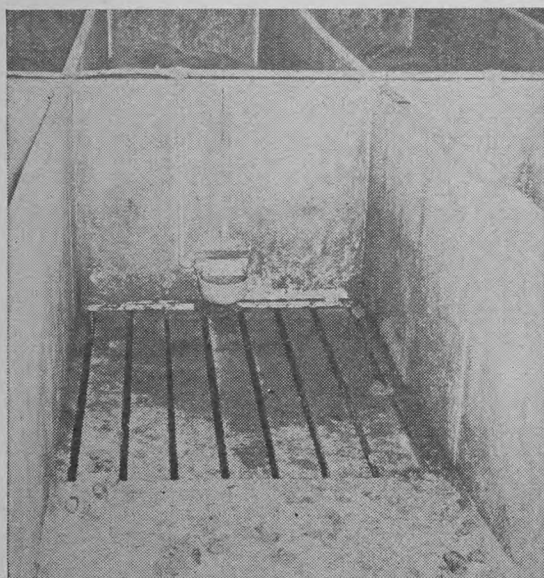
VENTILATION SYSTEM

Smell is eliminated by a 2-part automatic ventilation system which circulates clean air in the upper part of the building and draws off foul air through the manure pit.

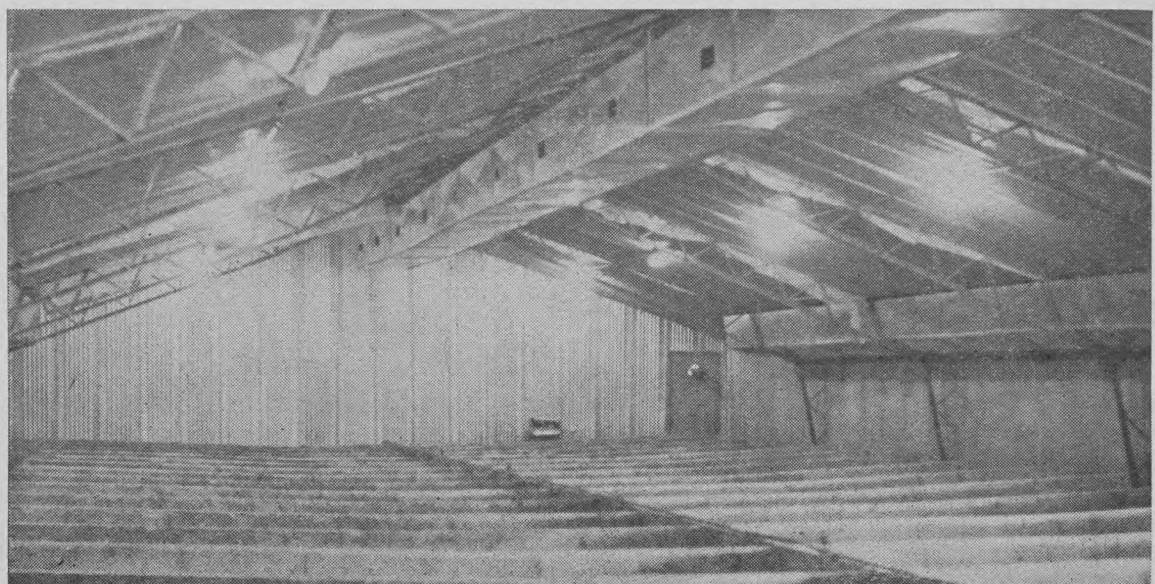
Clean air enters through two inlets located one on each side of the building's front end. It is forced down the length of the barn through metal pipes along the top of each wall, and returned via a vented pipe down the center above the pens. This air, warmed slightly by the animal heat from the pens, is then returned to the intake pipes so as to take the chill off incoming fresh air. Natural body heat from the pigs is all the heating this barn requires.

Foul air is drawn down through the slats of each pen to the manure pit. Twin ducts along each side of the pit carry it to the far end where it is expelled through outlets in the concrete foundation of the building.

Stan Price's feeder barn has no provision for auxiliary heating and no windows. There are four fluorescent lights for general use, plus additional lights for work periods. An access door is located near the feed bins at the front end. When the hogs



Pens have slatted floor at one end with water



Interior of barn. Fresh air return pipe is overhead, intake pipes along the walls. Note how pens slope



Stan Price points to the manure pit which is located underneath the pens

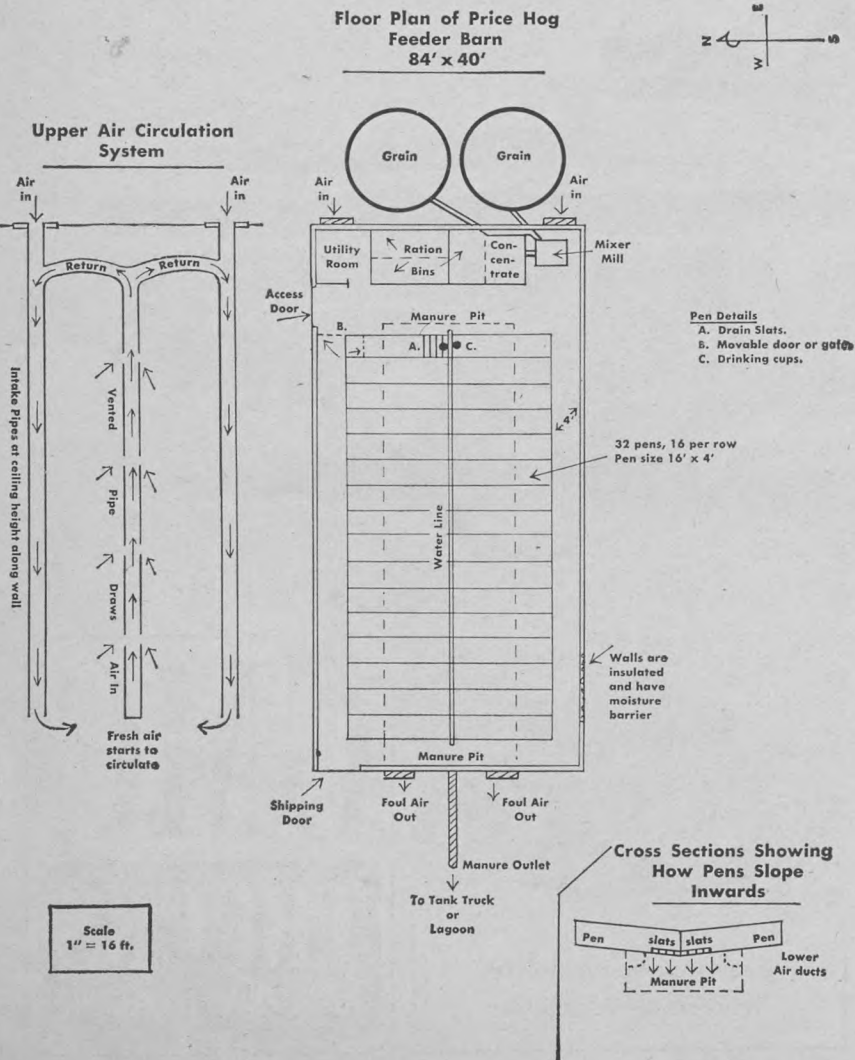
reach market weight they leave by a shipping door at the rear which was built at truck height so the animals won't have to go up or down ramps when they're loaded.

Stan doesn't use any bedding in the pens, and there are no feed troughs. The ration is placed right on the concrete floor where it is consumed with little or no wastage. Feed grinding and mixing is fully automatic. When the mill needs more grain it activates augers which draw their supplies from granaries outside the building. A protein concentrate comes from one of the inside bins. The ground ration is metered into overhead bins where it can be drawn off into a cart or

wheelbarrow and hauled to the pigs. Water is supplied by a single line down the center of the block of pens.

A feeder barn of this type costs from \$10,000 to \$15,000, depending on its location and the amount of work done by the owner. Pens are designed to accommodate about 10 hogs to market weight. This means an operator could handle at least 320 animals at a time, and have a yearly production of close to 1,000.

If the barn is kept to its maximum output, and allowing a capital depreciation of about 20 per cent, Stan Price figures the cost will be close to \$3 per hog sold over a 5-year period.



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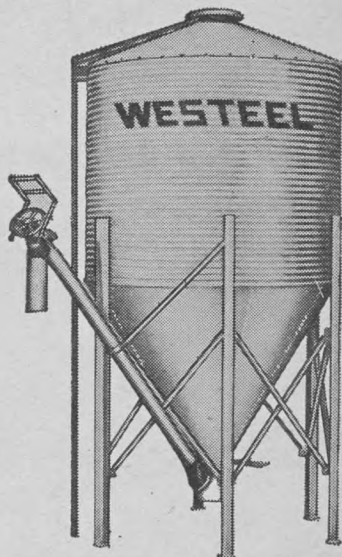
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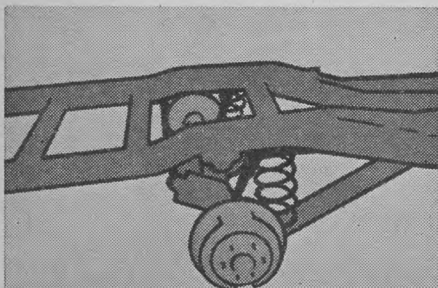
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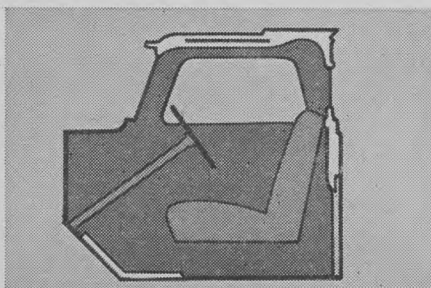
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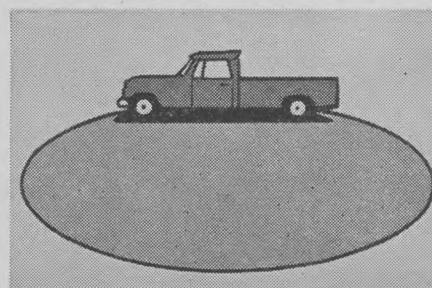
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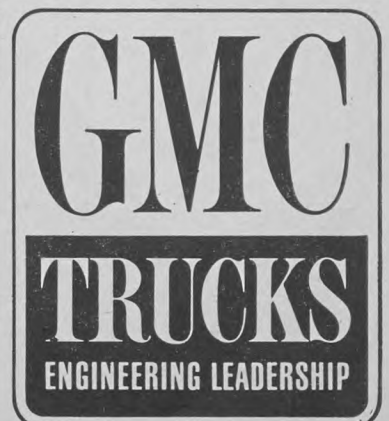
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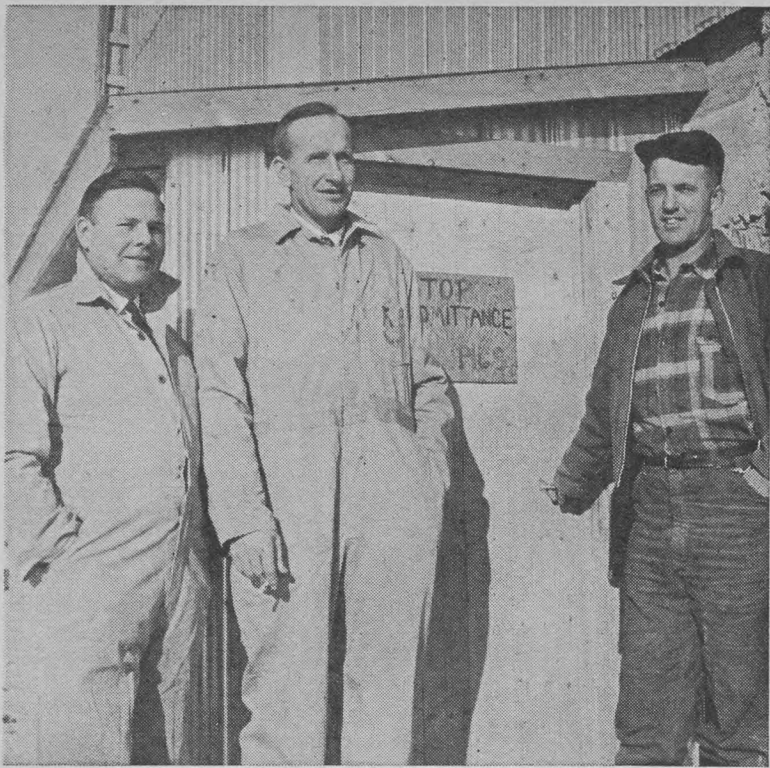


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Swine improvement team from left to right: Dr. "Chuck" Roe, OVC swine specialist, Eric Alderson, S.P.F. primary breeder, and Len Tustin, one of the first in the business with secondary S.P.F. herd

Len Tustin of Orangeville has one of Ontario's first "Secondary S.P.F. Herds" but for him . . .

Secondary Hogs Come First

by **PETER LEWINGTON**

Field Editor

ONTARIO'S SPECIFIC PATHOGEN FREE swine program is getting into high gear with phase two — the establishment of what are called "Secondary" herds.

The pioneers in the S.P.F. business were the farmers who established "Primary" Specific Pathogen Free herds. This was a prolonged and costly operation for them. Originally, pigs were born by caesarian section. That phase is now history and over the past few years several generations have been born naturally. So far, one dozen herds have been certified under the program. These, and others in process of certification, will be the source of breeding stock for those wishing to establish the "Secondary" herds.

Len Tustin is among 31 farmers across the province who have established new herds. These farmers are the beneficiaries of the S.P.F. program; they are not obliged to go through the costly processes which faced the primary breeder. These secondary breeders, in most cases, have seized upon the opportunity presented when a new barn was built or when premises have been cleaned, modified and kept free of hogs for at least 6 weeks.

For Tustin, the chance came when he sold his dairy farm at Brooklyn and started farming near

Orangeville. Within 6 months his herd could qualify for certification. All pigs would have to be raised to market weight. The pigs would have to be free of clinical symptoms of atrophic rhinitis and virus pneumonia. On post-mortem examination, they would have to be free of abnormalities of the head and lungs. Any deaths occurring after 6 weeks of age would have to be reported and post-mortems made. The growth of the program has necessitated the appointment of an additional veterinarian to the staff of the livestock branch.

"I have five purebred sows and a purebred boar," says Tustin, "and this makes me eligible under the S.P.F. program. But sales of purebred stock will be a sideline. I aim to produce 1,000 three-quarter Landrace hogs for market every year. Under the program, I get assistance and

supervision. There is an incentive for good management and sanitation."

Tustin foresees other advantages:

- Better feed conversion (feed is the major cost in producing a hog).
- Faster gains to market weight — perhaps 2 weeks.
- An excellent, if temporary, chance to capitalize on purebred sales.
- Elimination of atrophic rhinitis and virus pneumonia. Thanks to the overall program of sanitation, some bacterial diseases will also probably be avoided.
- Higher quality carcasses. He will use two main steps to accomplish this: (1) Selecting breeding stock from proven bloodlines. (2) Adding alfalfa meal to the finishing ration for the self-feeders, to retard the growth rate and prevent the over-finishing of market hogs.

Is the whole affair worth all the trouble? Is it practical? The answer appears to be "yes," provided certain sensible precautions are taken.

"It's common sense," says Tustin, "to protect your investment. I ask visitors to come in clean clothes and by appointment. I supply boots and coveralls. Before I even started, I also got assurance from my veterinarian of co-operation in a sanitation program."

Another essential partner in Ontario's S.P.F. program is Dr. "Chuck" Roe, Ontario Veterinary College swine specialist. "It's difficult to convince people of the importance of sanitation," says Roe, "but when a potential buyer comes into a secondary herd, he can see that sanitation works. Then, he may practice it on his own farm."

There is also a degree of responsibility expected of the primary breeder. Eric Alderson, who supplied Tustin with breeding stock, says, "We try to make everything clear before purchase. Then we follow up. If there are failures, the program will get a bad name."



[Guide photos

Tustin intends to produce 1,000 three-quarter Landrace market hogs annually. Breeding stock is sideline

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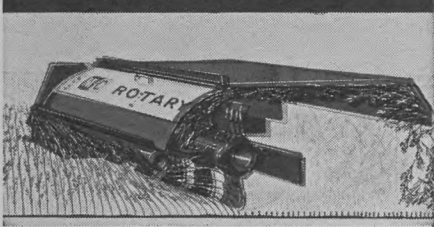
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**Mrs. Burpee on her
Arab stallion Khem.**
"He is equally as good
as a parade or stock
horse," she says

*. . . whether for working cattle,
going cross-country or performing under saddle
in a show ring, you can't beat . . .*

ARABIANS

*That is the view of
Alberta rancher's wife Mary Burpee*

THE ARAB IS INCREASING in
numbers, and is being used more
and more as a ranch horse. The
6 years that we have owned and
used Arab horses for pleasure and
ranch work is a short time compared
to those ranchers who have had
Arabs for the past 20 years or more.
But it has been long enough to con-
vince us that they are capable of
doing a variety of jobs—and doing
them well.

It is not uncommon for me to
ride our stallion, Khem, 30 to 40
miles on the days that we move
cattle. And I have never yet had to
help him carry his saddle home! That
he is a capable stock horse can be
judged by the fact that he and I
alone have taken our entire herd of
cattle, spooky yearlings and all,
across a busy paved highway and
an adjacent railway crossing. He
does the work: I sit there and hang
on. Khem with the help of his
daughter, Sha-Em, ridden by my
daughter, Heather, cut out and
brought home three head of reluc-
tant steers who were enjoying a
romantic life among 100 head of
our neighbor's cows. That may not
sound like much of a feat, but any-
one who has tried to handle cattle in
rough, bush infested pastures, with
July heat and flies to bug them can
appreciate that it took some mighty
quick foot work. The next day,
both horses went to an accredited
show and not only won their classes
but the judge called special atten-
tion to them as being the ideal
examples of classical Arabians.

At Ned's Creek Ranch, Pritchard,
in Central B.C., one may find owner
Brig. William N. Bostock, C.B.E.,
C.D., his wife, and family out mov-
ing their Herefords from one high
summer range to another; or you
might find them practicing a game
of polo mounted on the same Arabs.
Our visit to their ranch found them
just returning from a long day of
hard riding; working cattle in high
mountain pastures can be dangerous.
They have found their Arabs to be

tireless, sure-footed and safe. While
we were there, plans were made for
a polo game between the Bostock
family and a visiting Vancouver
team. The Bostocks ride the same
horses for polo as they do for ranch
work. I understand that the Van-
couver team returned to their homes
determined to get Arab polo ponies.

Ervin Ertman of Hardisty can
speak knowingly of the endurance
and agility of the Arabian breed. He
uses his stallion, Spitfire, for all sorts
of ordinary ranch riding and he also
has used him successfully to chase
and capture wild horses in the foot-
hills of the Rocky Mountains. In
rough terrain, the Arab's freedom
from wind troubles, his stamina and
ability to get himself over rocky
ground quickly make him a natural
for this job. Mr. Ertman claims
that his Arab outran and out-tired
the other horses used in the chase.
He loved the excitement and thrived
on days of hard riding.

Jim and Mary Cartwright of the
D. and E.P. ranches west of High
River, have had Arabs about as long
as anyone in Alberta. Their first
Arab arrived at the D. ranch well
over 30 years ago and they have
been raising Arabs ever since, but
not exclusively. They wanted to be
sure that the Arab was the breed
most ideally suited to their needs. In
order to prove this to their own sat-
isfaction, they also raised various other

breeds for a number of years. If you
ask Jim or Mary how this panned
out, they will tell you that any
divergence from Arab blood resulted
in deterioration in the quality they
demanded of their horses. So now,
firmly convinced that the Arab is the
horse best suited for work on their
ranches, they are using nothing but
Arab bred horses with an aim of
having a working herd carrying
100 per cent Arab blood in the not
too distant future.

What has the Arab breed got that
makes it superior? Mr. Cartwright
would say, "endurance and dispos-
ition."

Cartwrights ranch in a big way:
much of their range is impassable
for truck or jeep, so good horses are
an absolute necessity. The long hours
they must spend in the saddle make
the use of easy traveling, good dis-
positioned horses, with plenty of cow
sense of prime importance. They
feed no grain, so their horses need
lots of inherited stamina and spirit
to carry them through grueling rides.
Cows pasture high ranges in the
summer—anywhere up to 8,000 feet;
horses must be sure-footed and tire-
less to cope with these extreme
heights.

Eighteen tons of salt are taken to
the summer ranges every year. This
is packed in, 200 lb. to a horse.
Here again, tough strong, level-
headed Arab stock is used. The pack
horses travel free. It takes little
imagination to realize the havoc to a
pack train one spooky horse could
cause should it panic on a high
mountain trail.

Arabs on the Cartwright ranch
are used to cut out cattle under
range conditions. It is not uncommon
for Jim to cut out 200 to 300 head at
one time, without the benefit of fence
or holding corral of any kind. Such
is the disposition of the Arab that he
likes his work, and with just a little
bit of polish, Jim can take him into
the professional cutting horse classes
and win against top quarter horses,
whose only life is the small cutting
arena and applauding spectators.
One can't help but wonder just how
foolish those same highly professional
horses might look if transplanted to
the Cartwrights' rugged foothill
country and asked to cut out a critter
or two.

Mr. Cartwright has suggested
that anyone doubting the stamina
and ability of the Arabian horse
should visit his ranch and see for
himself — or better yet, bring in
his own favorite breed and see if
it can keep up to an Arab's weekly
work routine at the D. and E.P.
ranches.

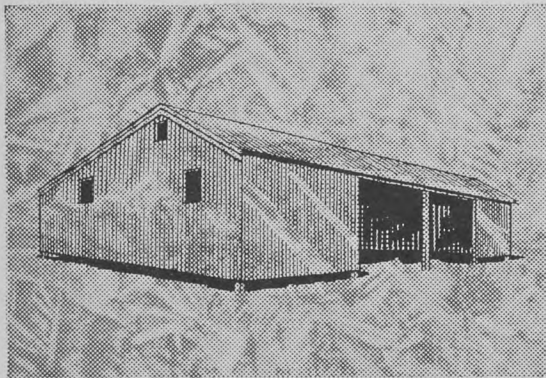
**Jim Cartwright with
his stallion Shabruk,**
ready for a day's work
around the ranch



How long will your equipment last?



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How long will your farm equipment last? That depends, to a large extent, on how well you protect it from the weather. Rain, snow and ice will cut years off its life expectancy.

According to a recent study, maintenance costs on equipment drop as much as 40 per cent when it is properly protected from the weather. For example, the life of a tractor can be extended as much as 20 per cent and drill life, 60 per cent. You can expect cultivators to serve you 25 per cent longer and combines 34 per cent longer. As a businessman, you know what this can mean in terms of lower depreciation and higher trade-in values. Another mighty important point; you waste far less time repairing farm machines when you protect them from rust and other weather damage.

Certainly, a galvanized steel implement shed is one of the wisest investments you can make. How *big* is the investment? Probably far less than you think.

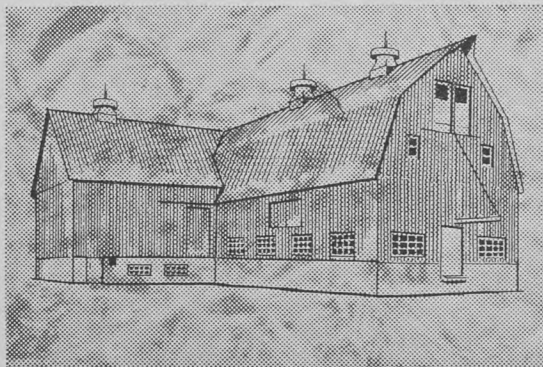
Because steel sheets have high structural strength, framing members can be more widely spaced. Erection costs less too—in many types of construction, panels can be quickly clipped or bolted together. This also means extensions and alterations can be made quickly and economically.

Think of your savings in building maintenance, too. Steel is strong; it defies impact that will damage other materials. And, of course, nothing stands up in rain, hail, and wind as well as galvanized steel. When considered in these terms, a galvanized steel struc-

ture costs less than other types.

Galvanized steel is clearly your best bet for farm buildings—and, when thinking of steel, it will pay you to specify *Dofasco Premier*. It is made by the *continuous* galvanizing process in which the zinc coating is permanently *bonded* to the steel. That means moisture can't get a start, so you get maximum protection from rust and corrosion.

For more facts on galvanized steel farm buildings, contact your fabricator, farm equipment dealer, or steel warehouse, and mail this coupon.



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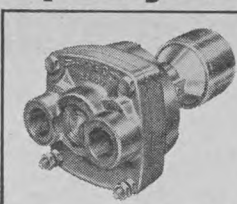
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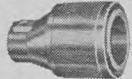
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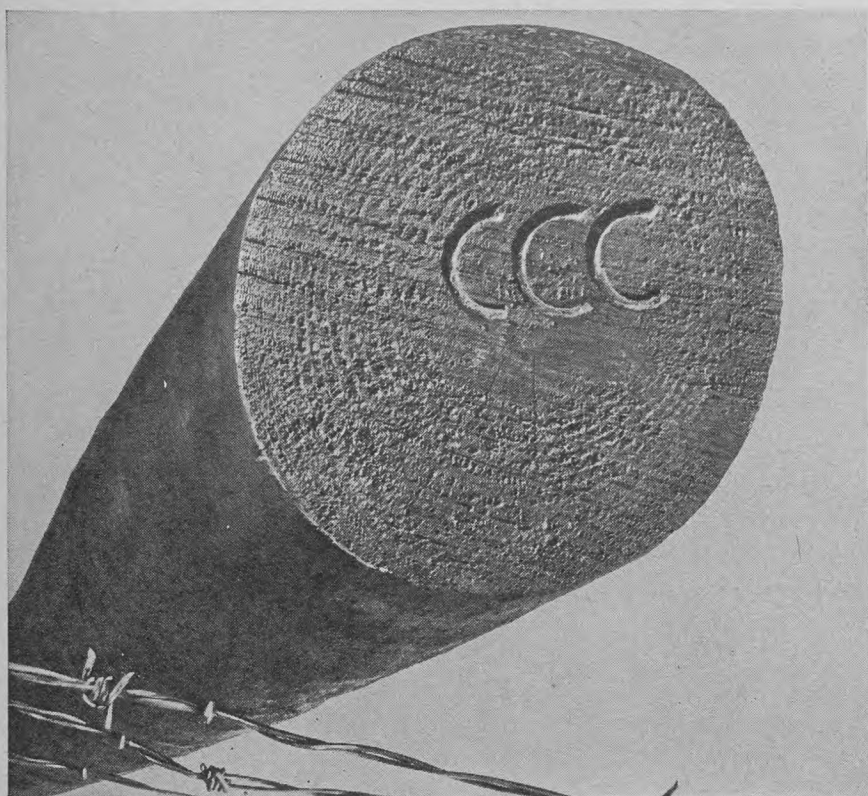
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Bill Roberts, MacGregor, far right, defends a point against Vern McKelvey, Anne Futrol and Bert Stonehouse at a leadership course



[Man. Dept. Agric. photos]

Laughs and Leadership Training

Prof. Jack Nesbitt stimulates noisy arguments, asks for far-fetched ideas, plays name-remembering games, has brain-storming sessions. It's his novel kind of leadership training for Manitoba farm communities

A FARMER SUGGESTED that a buzzer be installed on every party telephone line and set to ring 4 minutes after each conversation begins, to remind people that others might be waiting to use the phone. He won a \$5 prize for the best suggestion of the night.

A public school teacher demonstrated how to make tulips from egg cartons; a garage operator juggled with a barrage of parliamentary motions, amendments, and sub-amendments; a university professor donned a novelty hat and smirked at his audience—all in the name of leadership training.

The shenanigans and gimmicks were part of a serious, and novel, experiment carried out in the Carberry agricultural representative area in south-central Manitoba. The performers were a group of 45 organization and community leaders enrolled in a rural leadership short course held each Monday night last winter for 17 weeks. The course was unique both for its length—2-day affairs are commonplace but not a 17-session course—and also for its purpose and scope.

Purpose of the course was to provide training in leadership techniques to some of the leaders in the area. Reason for the training was to build a foundation of competent local leadership to initiate and carry out ARDA-type programs in community development. Course subjects included personal development, meeting management and parliamentary procedure, problem solving, basic psychology and community organization. The instructor was Prof. J. M. Nesbitt, chairman of the University of Manitoba's dairy science department and a recognized expert in leadership training.

Participants for the course were drawn from 10 towns and rural districts in the rural municipalities of North Cypress and North Norfolk, with the majority from Carberry, MacGregor and Austin districts. Each one was a guinea pig in this experiment, since his or her performance during the course and in succeeding months could determine

how the whole matter of organizing local area development groups might be attempted in the future.

About a year ago, area agricultural representative, Donald Meadows, was faced with the problem of promoting meaningful programs of area or resource development. His area had become part of the Central Plains rural development research region established under the Agricultural Rehabilitation and Development Act.

"Area development" has become a part of the Canadian vernacular since the Resources for Tomorrow Conference in 1961. It is, however, one thing to be familiar with current jargon and another to come up with something concrete in real programs for social and economic growth. The crux of Mr. Meadows' problem was to make theory practical.

The agricultural representative reasoned this way. "For my area, progress depends upon the ability of the local people to plan and complete programs that will satisfy the area's needs. Local leaders here are as competent as those in other rural areas, but, as is the general case, they lack training. If trained leaders are basic to any program, then a training course is the logical way to begin."

Mr. Meadows enlisted help from Prof. Nesbitt; met with provincial ARDA officials to gain both their approval and financial assistance; and then selected a nucleus of 10 local leaders to help plan a course and persuade others to participate. Each participant paid \$15 as his share of the cost and the rest of the tab was assumed by the province with ARDA assistance.

Participants included municipal and town officials, 4-H leaders, service clubs and chambers of commerce representatives and rural organization members.

Setting up a program for a course of this type was as much an experiment as the nature of the course itself. The only guides were the suggestions of the participants, plus the examples of shorter, more limited

courses. The needs of the area had to be considered since some topics would be more pertinent or require greater emphasis.

The first step in instruction was routine—establish the self-confidence of each individual. Prof. Nesbitt accomplished this with the time-proven gimmicks such as self-introductions and name-remembering games, short spontaneous speeches, group discussions, brain storming and small group debate sessions. These exercises were repeated at several consecutive meetings until each person felt at ease with the others and could express himself freely.

Other major items taught in personal development included thinking objectively and creatively, and expressing ideas clearly. The Firdale district school teacher with her ideas on making artificial tulips and the Austin district farm wife who in-

a farmer and 4-H club leader from the Beaver district put it, "the most important single thing I got out of this course was the realization that my area cannot exist alone. There is little sense in MacGregor and district competing against the Austin district, for instance, when each depends upon the other."

Harry Dankesreiter of MacGregor felt he learned useful techniques in supervising meetings. "I'm also impressed by the fact that each organization must work in closer harmony with all the others. I know now that we must combine our re-

sources if anything is to be accomplished."

To Don Meadows the experiment was successful in developing the leadership capabilities in his area. "Many of these people have already put some of their new knowledge to work with good results.

"Also they now know one another well and will find it easier to work together. If this course has accomplished nothing else it has demonstrated the need for less inter-community rivalry and more co-operation. Co-operation is possible when leaders can appreciate the

total needs of the whole community."

The future is encouraging because of the course. Plans were discussed at the final meeting for providing a similar course next winter for those leaders who could not be handled at the first one. An executive was also appointed to keep the group in touch with each other. In time, these local citizens could well be the nucleus of an aggressive area development committee of leaders trained to guide the area's future progress. — J. D. Giles, Manitoba Department of Agriculture. V



Mrs. Violet Lewis of Austin tries an original "Lewis" creation on Prof. J. M. Nesbitt during one of the regular sessions of the leadership courses

vented the unique hat donned by Prof. Nesbitt were simply applying the art of creative thinking.

"Teaching people to think sounds a little unnecessary," Prof. Nesbitt says, "but most people use only about 10 per cent of their brain power much of the time. They are taught in school to accept things they read, so the process of critical thinking may not be developed."

Because community projects are initiated and carried out at meetings, parliamentary procedure and meeting management were taught.

With the course designed ultimately to foster area development, studies of community structure and dynamics were considered important. Guest speakers outlined the theories of communities and explained how communities change and why they change. Trade center areas were described. Participants found that two separate trade center areas existed in the two municipalities—one was centered by Carberry and the other by MacGregor. This revelation alone will be vitally important when actual development projects are considered in the future.

At the same time the leaders learned how one district is dependent upon another. As Lloyd Street,

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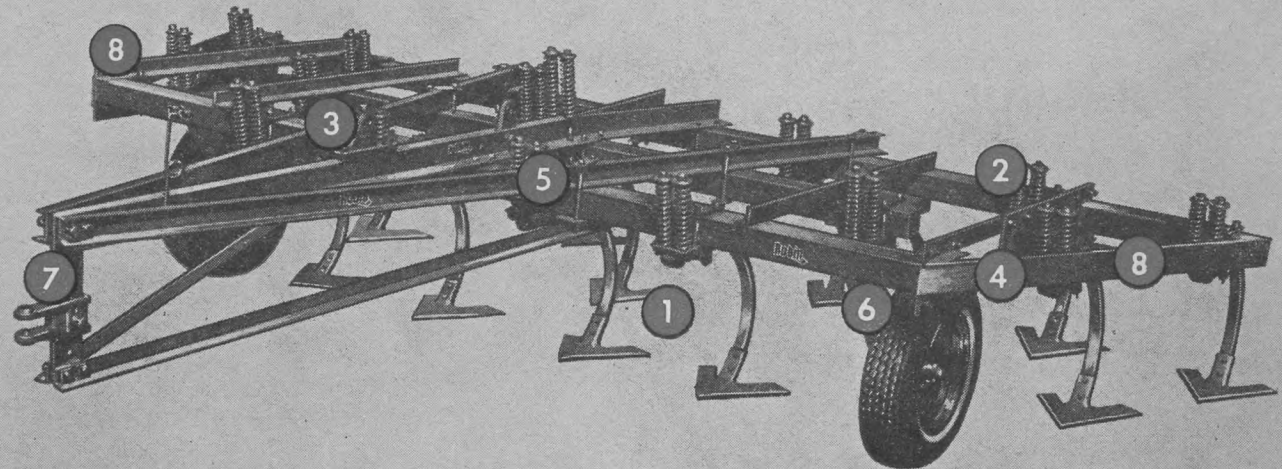
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TWEDDLE FARMS - Fergus, Ontario



Ken Dunn feeds 100 cattle a year, many of which are financed through the Kindersley Feeding Co-operative, of which he is a supervisor

What About Feeding Co-ops?

They help farmers finance the purchase of steers, provide essential advice and supervision of the feedlot too

MANY grain growers who wouldn't, or couldn't, consider having livestock a few years ago are operating farm feedlots today. Says Ken Dunn, who farms 960 acres a few miles north of Beadle, Sask., "I wouldn't want to get rid of my feedlot now. It has become a normal part of my operation. A feedlot gives you a sure income when grain is hard to market, or crops have been poor."

One reason for the increase in farm feedlots is the growth of local feeder co-operatives where farmers are able to pool their credit for the purchase of feeder stock. Ken buys his cattle through the Kindersley Feeding Co-op, which operates under the supervision of the Saskatchewan Wheat Pool. This amounts to financial backing of the Co-op up to 25 per cent of any losses incurred.

The Kindersley Feeding Co-operative has about 35 members drawn from a 30-mile radius of the town. These members feed about 700 head of cattle a year. All finished cattle are marketed through the Pool's Livestock Division, which means they must go through a stockyard where there is a Pool buyer. None of the animals can be sold directly to a packer.

When Ken Dunn wants to buy some feeders he applies to the Co-op for, say \$5,000. The limit allowed is \$10,000, but no member can get over \$5,000 without special approval of the Co-op's 6-man board. Ken has to pay only 5 per cent (in this case, \$250) of this, however. The balance doesn't have to be paid until the animals are finally sold. But an initial fee of \$3 per head is charged when the purchase is made. Co-op funds come from a group loan through the Kindersley Credit Union.

Buy Cattle Anywhere

"Our buyer, Dave Phillips, can get the cattle anywhere," Ken Dunn explained, "but all the bills have to go through the Saskatchewan Wheat Pool. Most of the animals are bought in either Cereal, Alta., or in Saskatoon. Personally, I prefer the range-type feeders from the Cereal area, because the beef breeds are hardier. There's too much dairy blood around Saskatoon."

At the present time, Ken is supervisor of the Kindersley Feeding Co-op. His job is to travel around the district and see that all the cattle are marked with the Co-op's "I.K." brand. The feeder association actually owns the cattle it has financed on members' farms.

Ken Dunn feeds about 100 head a year, some of them of his own breeding. He buys feeder calves about November 1, and keeps them right through to August or September. But he likes to get rid of them before harvest. All the money from the sale goes to the Co-op until the feeder loan is paid. Last year the feedlot accounted for about a third of his total farm income.

The feeder ration consists of grain, straw, minerals and vitamin A. The latter is considered a must in this area. Ken buys most of his vitamin A in liquid form and feeds it in the water all year around. Three bottle capfuls in the water trough in the morning and three more in the afternoon will last his cattle 2 days. If there aren't many animals in the feedlot, Ken puts a bit of powdered vitamin A in the ration. But he prefers to feed it in liquid form because a powder mixed with the chop has a tendency to blow away. All feed grain and roughage is produced on the farm. Oats and barley fed amounts to about 2,100 bushels a year.

Livestock

Grows His Feed

"If I couldn't grow it on the place I wouldn't be feeding beef," said Ken. "A small operator can't work on as narrow a margin as a big one."

Like most western farmers, Ken could use some extra pasture. What cows he can't handle through the summer he places on the nearby Eagle Lake Community Pasture, where they are bred by A.I. If a good moisture year comes along, he intends to put 100 acres of his poorer land into cultivated grass.

"I got only 600 bushels of grain off that piece last year," he said, "and it added quite a bit to my cultivating costs because of breakages from stones."

Ken saves on machinery costs by pooling his operations with his brother Ray, who owns the farm next door. A welding shop at Ray's handles the repair jobs for both places. The brothers even hook their tractors together so they can save fuel and keep the machines going all day long. They figure they save a gallon of fuel an hour that way.

The brothers generally summer-fallow about half their land because of the low moisture situation in their area. But last year they divided an 80-acre summerfallow field in two, and sowed half of it with their leftover seed. They got 5,000 bales of roughage from that field, and might try this again.

"It was treated seed so it had to be used," Ken explained.

Ken and his wife, Lorna, were married in 1951. They have 5 children: Wendy, 12; Dennis, 8; Kenny, 7; Ellen, 5; and Coreen, 3. In 1955, the Duns bought an old school building in the district and moved it to the farm where they rebuilt it into an attractive home.

"If I had it to do over again I'd just buy the lumber and build a proper house," said Ken. "When we got it here we found the building wasn't even square. We had to hit it a few bangs with the tractor before we could get it to fit the foundation. Then we tore out all the inside until only the four walls were left."

Apart from his Feeding Co-op job, Ken is a board member of both the Eagle Lake Community Pasture and the Eagle Lake Breeding Co-operative. He is also secretary of the Beadle local of the Saskatchewan Wheat Pool. If you can't raise anybody at the farm of a winter's afternoon you will find Ken and his wife at the Kindersley curling rink, and probably most of their neighbors too.

Like most grain farmers who run a fairly small feeding enterprise, Ken Dunn hasn't gone in for feedlot automation.

"Automation is all right for the big operator who has to hire labor," he said, "but I prefer to feed by hand. This way I get a chance to look the animals over every day to see if there are any sick ones."

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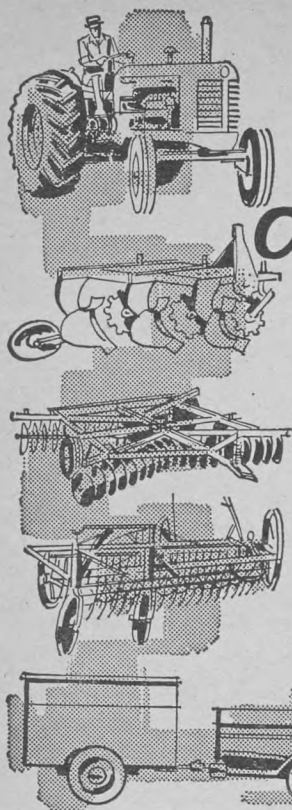
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Dairying

Help Yourself to Mastitis Control

MILK PRODUCERS in Ontario, Nova Scotia and Prince Edward Island have taken advantage of 1-day training sessions which help provide some answers to the dairyman's worst problem—mastitis.

In Ontario the stimulus came from the concentrated milk producers and as a result the sessions have been held in various parts of the province from Niagara to New Liskeard. Drs. Ken McEwen and Howard Neely of OVC who run the "road show" are enthusiastic about the value of the idea and this enthusiasm is shared by the producers. Says Sid Pearson of Embro, who is the Concentrated Producers president, "It was so well received by the producers that we have already booked Dr. McEwen for next fall. Mastitis control includes a lot of small details. This training helps producers to help themselves to better quality milk."

Self-help is the key to the popularity of the mastitis clinics. Producers find there are a lot of things they can do to keep mastitis to a minimum. This is on-the-farm management and it does not necessarily involve high expenditures.

These economical 1-day sessions are a distillation of the Ontario Mastitis Control Program and they have enabled a larger number of producers to be reached in a short time with the available resources.

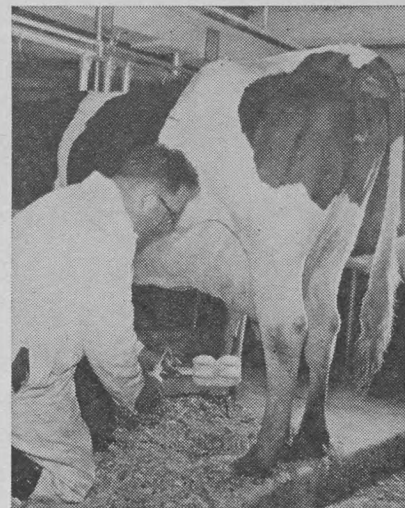
This is the pattern of the day-long clinics: the milk group responsible (both whole milk and manufacturing organizations have participated) arrange for the attendance of small groups of some 35-40 dairy farmers. McEwen and Neely, working as a team, review the stress on the modern high-producing cow, the misuse of antibiotics and the relationship between abnormal udder conditions and milk quality.

The cost of mastitis includes loss of production, cost of treatment and the loss of quarters or, in some cases, the cow. Farmers are encouraged to fire off questions and then they break into small groups to review the cost of mastitis in their own herds.

In areas where the sessions have been held, practicing veterinarians have offered their facilities for carrying out the California mastitis test (the Gel test) for each cow in the herd, monthly for 3 or 4 months. This pinpoints the problem cows and individual tests on quarters can then be done. Chronic carrier cows can be eliminated or an attempt can be made to treat the more promising cows when dry. Here are some of the pointers gleaned from the sessions:

- Vacuum pumps and lines are too often taken for granted. They require periodic maintenance just like any farm equipment. As herd size has grown the original pump can frequently only produce low or fluctuating vacuum. Vacuum lines need regular flushing.

- Sanitation includes adequate cleaning of all metal and rubber milking equipment. Teats should be washed in a solution according to manufacturer's directions and teat clusters disinfected between each cow.



Dr. Howard Neely demonstrates how to use the California Mastitis Test

- The use of individual paper towels is essential to avoid the spread of mastitis.

Herd size, production per cow and efficient feeding are all important. They shrink in importance if mastitis is permitted to become a herd problem. More and more dairymen are becoming aware of streptococcus and staphylococcus mastitis and what can be done about them. There is no magic shotgun treatment for mastitis—but better herd management backed by technical laboratory help is working a special magic for co-operating dairy farmers.—P.L. V

Avoid Grazing Weeds

DAIRY FARMERS and cream shippers are urged not to tempt their milk cows with new spring growth too soon, if the spring greenery is mainly weeds.

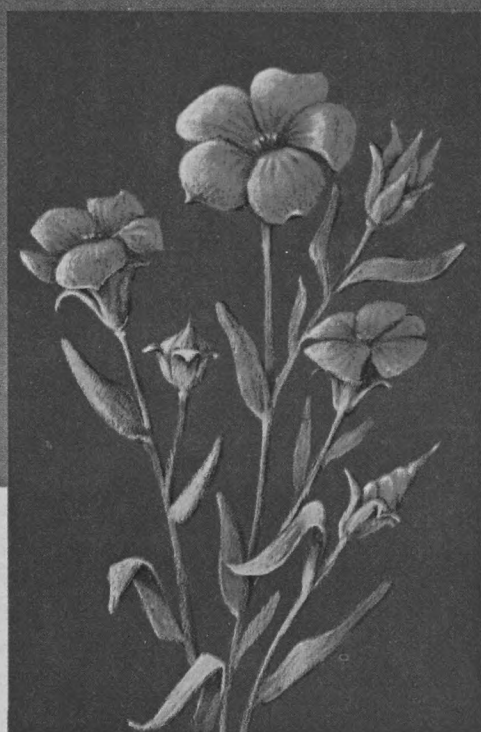
According to Herb McRae of the Manitoba dairy branch, impatience in getting the milk cows onto pasture early often leads to weed-tainted milk. The first growth in pastures and yards is generally weeds, especially stinkweed. A short delay until the grass appears will prevent the nuisance of handling bad tasting milk.

Spray the weeds with 2,4-D as early as possible, Mr. McRae says. If the animals have been foraging on weeds, take them off pasture at least 4 hours before milking time. If only one or two cows have succumbed to the temptation of stinkweed, separate their milk from that of the other cows.

Tainted milk or cream though accepted by creameries commands a much lower price than the clean flavored product. V

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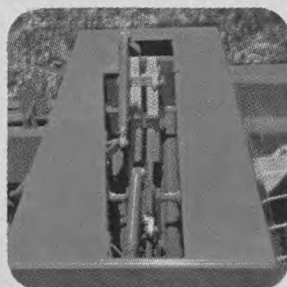


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WHEN DUST CLOUDS GATHER



Recent dust storms in southern Alberta obliterated the landscape in scenes such as this [Guide photos]

Cliff Faulknor reports on the increasing dust storm problem in the prairies, and tells how to control soil drifting

ONE DAY RECENTLY a dark cloud suddenly appeared to the north of Calgary. In a few minutes Spy Hill had disappeared from view, and cars in the northwestern part of the city were using their headlights. As the dust descended gardens got a bit of topsoil, so did the houses, including the drapes and furniture.

During the past winter this scene has been a common one in parts of southern Alberta. The biggest drifts have occurred in the Vulcan, Strathmore and Drumheller areas. In the Lethbridge-Fort Macleod region, where winds pouring out of the Crow's Nest have been known to gust up to 100 miles an hour, drifting hasn't been as heavy. Farmers down there expect droughty conditions and high winds and guard against soil losses with strip cropping and blade cultivators.

Although drifting has occurred over a wide area it hasn't been to any great depth, so this year's crop isn't expected to suffer. But some municipal districts are alarmed at the ease with which a thing like this can happen. There is even talk about invoking the Alberta Soil Drifting Act to prosecute farmers who fail to take precautions against soil blowing. However, as Calgary District Agriculturist Al Beattie points out, in this case the farmers can't be blamed entirely. Last summer they let the weeds grow on their fallow land, expecting a killing frost in early September. But no frost came and the weeds kept growing — using up precious moisture until finally they just had to get out and cultivate.

Every farmer who lives in an area where soil blowing is a possibility should see the National Film Board picture "The Drylanders." For those who were around in the Thirties it will be a reminder; for those who

weren't, it can serve as a warning. Every time a piece of your topsoil takes to the air your farm has lost a bit of its ability to produce. A factory owner would get the same result if he let somebody come in two or three times a year and remove a piece of his machinery. But he would still be better off than you because he could always order new machinery. Once your soil has gone there isn't much you can do about it.

Not all wind erosion is as spectacular as the dust clouds of the Thirties. In fact, when fine particles of dust whirl up and blot out the sun you're merely looking at a sideshow. The main performance is down near the ground where the heavier soil particles are being blown across your fields to lodge along the fence rows, in the ditches and shelterbelts. This is the scalping action that can strip your fields down to the barren subsoil.

Sometimes the soil removal is so gradual it is hardly noticed. Gusts of wind carry off an inch here and an inch there over a wide area. This is worse, if anything, because you aren't alarmed enough to take any action. But year in and year out the process goes on until you suddenly realize you aren't getting the yields you once did. You notice another thing too. After a rain your soil doesn't seem to hold the moisture as well. In places where the subsoil is exposed, it hasn't penetrated the ground at all but has run to fill the sloughs and ditches.

The most dangerous time for soil blowing is in spring, or late winter in areas where snowfall is scanty. Winds are generally strong and the soil isn't protected by vegetation. The danger is intensified in periods of drought because crop residues are small and soil particles tend to break down when there is little moisture.

But drought alone doesn't cause wind erosion. Soil drifting can be a hazard in moister areas too.

SOIL MOVEMENT begins with the most erodable particles on the more exposed parts of your land. The direct force of the wind dislodges the particles. They move a short distance along the surface and then suddenly shoot up in a jumping movement the experts call "saltation." They gain speed in the air and strike the ground again with considerable impact. Larger particles don't jump at all. They just roll and slide along the surface. It's the jumping particles which provide the main driving force in the erosion process. That's because the wind velocity a few inches above the ground is much greater than the velocity at ground level. In fact, from 90 to 98 per cent of these "saltating" particles move less than a foot above the ground.

This is your clue to halting soil blowing on your farm, for the chief cause of wind erosion is the way we use the land. The whole process can be halted by slowing down the wind. You can do this by increasing the surface roughness in your fields. The ability of standing stubble or ridged strips to trap moving soil depends on how high the saltating particles jump. This, in turn, is influenced by your soil type. In most cases, a good 7-inch stubble will cut wind velocity to zero up to 4 inches above the surface. A heavy trash cover will stop soil blowing completely in any wind because it binds the surface together.

Sometimes it is not possible for you to maintain a heavy trash cover. Maybe you've had a series of skimpy crops, or live in an area where straw decomposes rapidly. In cases like these, you will have to consider other measures such as strip cropping, or

keeping the surface of your fields lumpy. Wind erosion increases in intensity as you move to the leeward of where the movement starts. A shorter length of erodable area means a smaller amount of damage done. That's where strip cropping and shelterbelts come in. They reduce wind velocity a long way to leeward and break up the erodable area into smaller units. Trash cover and soil lumpiness can be maintained by cutting down on the use of disc implements.

IF YOU BURN crop stubble you are throwing away one of the most valuable assets on the farm. On the surface, this stubble will protect your land from blowing. When it decomposes it adds humus to the soil. The whole process works like compound interest. Decomposing stubble provides food for soil microbes, and these organisms help maintain the nitrogen content of the soil. As new humus is formed, it increases the land's water-holding capacity.

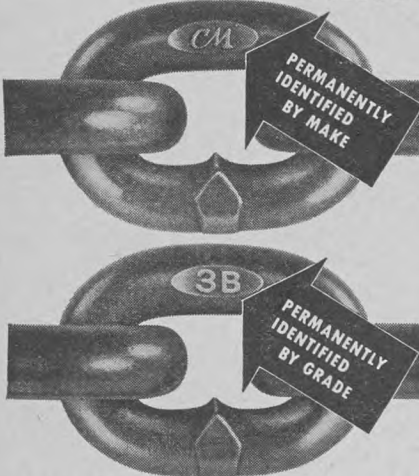
Traffic experts say that most accidents happen because somebody was doing something they shouldn't have been doing. The same could be said about drifting soil. But once your land starts to move there isn't much point in telling yourself what you should or shouldn't have done. It's time for emergency measures to prevent the damage from spreading.

"Guide to Farm Practice in Saskatchewan," a booklet prepared jointly by the Saskatchewan Department of Agriculture and the University of Saskatchewan, lists four emergency practices which can be applied with good results almost anywhere: (1) Plowing furrows at intervals of a few feet or yards around and throughout the area; (2) deeply ridging the soil with a lister

(Please turn to next page)

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such as a duck-foot cultivator or one-way with half the shovels or discs removed, or a cultivator equipped with listing shovels; (3) spreading manure or straw over areas likely to drift, preferably before drifting starts; (4) any method that will roughen the soil surface by bringing clods to the surface.

Portions of your fields that show a continuous tendency to blow should be seeded permanently to grass or legumes.

No general recommendations on wind erosion control will completely fit the conditions of your own particular area, or your own type of soil. For a permanent solution to the problem you should consult your provincial department of Agriculture. In many cases they will provide trained personnel to advise you on such things as the best implements to use, and how often you should



After the storm valuable topsoil was piled along fence lines as far as the eye could see

use them. If strip cropping is indicated, they can also tell you what strip width you should use to do the job.

Everybody loses when soil starts to blow. In severe cases, railroads and highways have been buried and bad traffic accidents have occurred. Drifting soil has carried insects and weed seeds far and wide, spreading the areas of infestation. Fences, hedges and shelterbelts have been destroyed. Farmsteads have been blocked and farm buildings ruined. Dust storms are unpleasant for both city and country people alike. Any extra work or planning involved in reducing this hazard is repaid a thousandfold.



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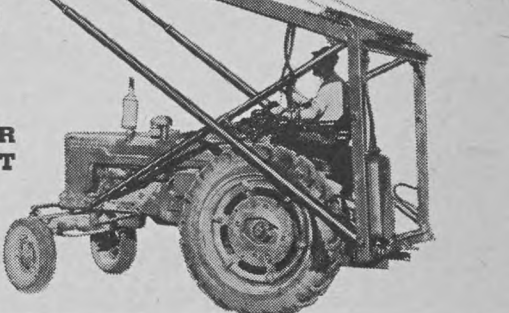
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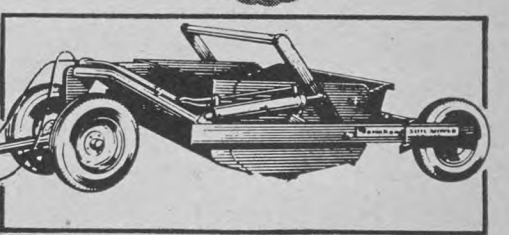
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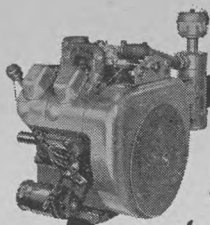
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New V-461D incorporates individual aircraft style cylinder heads; center roller main and tapered roller end bearings; hi-temperature safety switch, and Stellite plus rotators for up to 500% longer valve life.



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the best-protected engine made for heavy duty in extreme heat, severe dust, and under changing loads and terrain. Air-cooling simplifies field care to adding fuel, and keeping the oil level and the air-cleaner clean.

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Soils and Crops

Cheaper Forage for Prairies

with new hybrids of

- Corn
- Sorghum
- Sorghum—Sudan grass

NEW CORN hybrids just coming on the market, or soon to be licensed for sale, show great promise for the irrigated areas of the southern prairies, according to Steven Molnar, horticulturist in charge of vegetable and forage trials at the provincial horticultural station, Brooks, Alta. In fact, it is predicted that silage corn will become the basic cattle feed in this area within 5 or 10 years.

"These new varieties will enable stockmen to raise more cattle because they will give a bigger feed supply," said Steve. "And silage is a more natural feed than hay. It is closer to the natural green forage you get from fresh pasture for there is a smaller loss of nutrients during processing."

The Brooks station began testing these hybrids in 1961 with five new varieties. In 1962, the tests included 13. These varieties came from many sources including the CDA Experimental Farm, Morden, Man.; Bowman Seed Co., Concordia, Kans.; Warwick Seed Co., Blenheim, Ont.; Crookham Seed Co., Caldwell, Idaho; and the DeKalb Seed Co., DeKalb, Ill.

"We were testing mainly for yield and suitability to this area," Steve Molnar told Country Guide. "A good silage corn for our conditions must be able to mature to the dough stage before the end of August."

One early-maturing variety, Idahybrid 330, yielded 38.72 tons per acre of green feed in the 1962 test and 30.58 tons in the 1963 test. Warwick 401 produced 43.51 tons per acre in 1962 and 31.39 tons the following year, while P.A.G. 62 gave 38.48 tons per acre in 1962 and 34.65 tons in 1963. However, both these

were expensive and market prices low, the corn gave him an abundance of cheap feed so he could keep his costs down.

Similar variety tests were conducted at Lethbridge Research Station under pasture specialist Dr. Don Wilson. Although yields were a little lower in this area, the three varieties named showed up well in 2 or 3 years of testing. It is expected that Idahybrid 330 will be licensed for sale this year.

"Silage corn is firmly established in this area today," Don Wilson said. "I don't think many of those who have tried it want to go back to the crops they were growing before. There are better hybrids available



Dr. Don Wilson

now, and better harvesting machinery. Fertilizer is also cheaper and more abundant."

All test plots had the benefit of heavy applications of irrigated water and fertilizer. Corn doesn't appear to have any limiting factor in its response to fertilizer. At Brooks, 200 lb. of 11-48 and 60 lb. of 33.5-0-0 was applied per acre.

The tests also showed that about 11 of the varieties might have some value as a grain crop, although it isn't expected there will be any expansion in grain corn grown in this area for some time.

Other forage species which show promise are certain hybrid sorghums and sorghum-Sudan grass hybrids. Although the former have only been on test for 1 year, four varieties of sorghum-Sudan grass hybrids were tested in 1962 and 1963. Two of them gave a dry matter yield of about 6½ tons per acre. They need a long time to establish their root systems, but once they have taken hold they can stand pretty severe drought conditions.

"These sorghum-Sudan grass hybrids can be used for two purposes," Steve Molnar said. "If the season is very dry they will give good late summer pasture. In a year of good moisture, they will give a heavy hay crop in a short period of time."

A High River farmer who put in a sorghum-Sudan grass crop last year found it had grown between 7 and 8 feet high by the end of August. He planted it about the middle of June.

(Please turn to page 36)



Steve Molnar

latter varieties were later maturing than Idahybrid 330. Dry matter yields for these three varieties averaged 7.89 tons per acre for the 2 years.

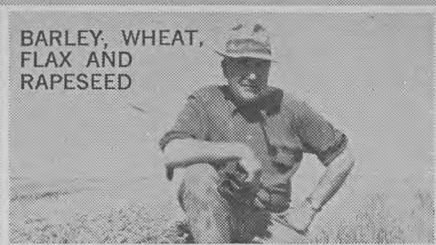
A Bassano rancher grew 90 acres of hybrid corn in 1963 and intends to double his acreage this year. Using the Idahybrid 330 and Warwick 401 varieties, he obtained well over 7 tons per acre in dry matter yield. Farther south, at Welling, Alta., a cattle feeder claims that his silage corn was all that kept him in business last year. When feeder cattle

WHEAT



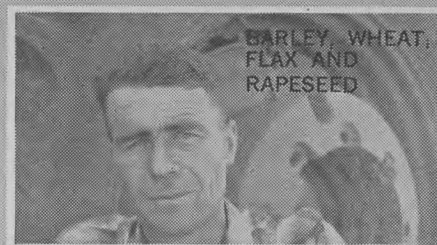
"This year, I sprayed the worst patches of wild oats with Carbyne, and in these areas, the yield was at least double. You can't beat that. Next year, I intend to use Carbyne on most of my crop."

Fred Betcher
Swan River, Manitoba

BARLEY, WHEAT,
FLAX AND
RAPESEED

"I've used Carbyne on nearly 500 acres of wheat, barley, flax and rapeseed over the past four years. Results have been very good. Carbyne kills wild oats. I'll use it again whenever I have wild oats. Carbyne pays off."

J. Russ Turner
Drumheller, Alberta

BARLEY, WHEAT,
FLAX AND
RAPESEED

"We have used Carbyne for four years on wheat, rape, barley and flax with very good results. I like to seed early to get best yields and then use Carbyne to control wild oats where they appear. I wouldn't be without Carbyne. It's saved me a lot of money."

Herve Casavant
Tisdale, Saskatchewan

Carbyne results are easy to see. Wild oats are thick in light, unsprayed "skips." Carbyne-sprayed area is clean.

Kill Wild Oats After They Come Up

One spraying of Carbyne at the right time pays off in cleaner fields and bigger yields. Here's how:

When wild oats infest your fields, they steal you blind. An average infestation cuts wheat and barley yields at least six bushels an acre. A heavy infestation can take over your entire seeding. Or, you can protect yourself from these losses by spraying Carbyne.

The cost of Carbyne to control wild oats amounts to only a little more than two bushels of wheat per acre. One spraying of Carbyne kills wild oats in your crops—*after* you see them. Since you treat only the infested acres, you can easily expect to get back triple your investment in increased yields.

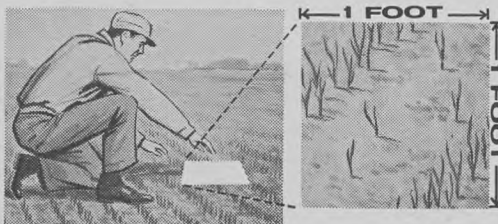
Don't Wait Too Late

Over the past three years, farmers have successfully controlled wild oats with Carbyne on more than one million acres of crops. Yet, each year, many farmers miss their chance to kill costly wild oats with Carbyne. They simply wait too late to check their fields.

Carbyne suppliers report that half the fields they are called to inspect are too advanced for spraying. This is a mistake you can avoid simply by acting promptly.

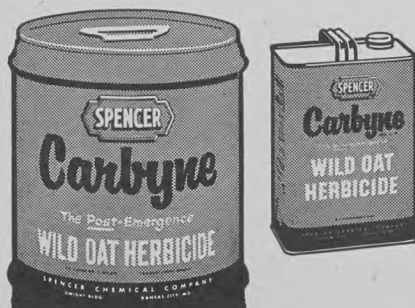
The time to spray usually comes four to nine days after emergence. During this stage, it is difficult to spot even a heavy flush of wild oats from the road. Close inspection by walking the fields is the answer.

As few as four wild oat plants per square foot (as shown below on right) can cause serious yield losses. When your fields look like this, you'll be money ahead to spray Carbyne as directed on the can label.



9 Approved Crops

Farm-proven Carbyne is approved and recommended for use in *spring wheat, durum wheat, barley, sugar beets, flax, peas, mustard, rape and sunflower.*



Mix Carbyne with water according to instructions and spray on the growing crop during the 2-leaf stage of the wild oats. For best results with standard field sprayers, pump should maintain at least 45 pounds pressure with all nozzles spraying.

About 4 days after wild oats emerge, they should have about 1½ leaves. From this time, until the plants develop 2½ leaves, or about 9 days after emergence—spray CARBYNE.



When most of the wild oats look like this, SPRAY!

EXCEPTION: If due to abnormal conditions the wild oats are delayed in reaching this stage, spray before the 14th day after emergence.

One spraying at the right time does the job. Just follow label instructions carefully. That's important. So, don't be trapped into a last minute rush.

Get the facts on Carbyne wild oat control from your farm chemical supplier right away. See him this week for your free copy of the new 1964 Carbyne folder.

New one-gallon pail makes enough spray to treat almost 5 acres of infested cropland. Now available from ...
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Roll your own with **EXPORT** CIGARETTE TOBACCO



FINEST VIRGINIA LEAF

SOILS AND CROPS

(Continued from page 34)

"If you find you're going to be short of feed," said Don Wilson, "you can stick this crop in right after a June rain. When the warm weather comes it'll grow very rapidly.

Farmers who feed Sudan grass or sorghums have to use them with caution because of concentrations of prussic acid in these crops under certain conditions. They must not be grazed too early or fed right after a heavy frost. The following precautions should be carefully observed: (1) delay grazing until plants are 18 inches tall; (2) do not graze regrowth until new shoots are 18 inches tall; and (3) allow plants to dry completely after a frost.—C.V.F. V

Beaver Alfalfa Yields Well

FARMERS CAN now get hold of ample supplies of Beaver alfalfa. It's

probably the best variety to hit the prairies since Vernal.

Beaver is highly resistant to bacterial wilt and in 63 tests at 18 places in Western Canada has averaged over 2½ tons of dry matter per year. In Alberta, where Beaver yielded 3 tons, Grimm yielded 7 per cent less. In Saskatchewan, Beaver does well although Rambler is still best in the dry areas. Beaver and Vernal are equal in Manitoba.

The size of first cutting interests most people. Here, Beaver really does well. It was 10 per cent better than the first cutting from Vernal or Grimm in Alberta and Saskatchewan and the same as Vernal in Manitoba.

Because of its wilt resistance, expect Beaver to take over from Grimm and maybe Vernal. Seed costs will be in the neighborhood of 75 cents a pound. V

New Sunflower Variety Licensed

PEREDOVIK, a Russian variety of sunflower, has been licensed by the Canada Department of Agriculture for production and sale in Canada.

Peredovik performed best of several Russian varieties of sunflowers tested at CDA experimental farms in Western Canada in 1962 and 1963, says Dr. E. D. Putt of the CDA's Morden experimental farm.

A plentiful supply of commercial Peredovik seed is available through agencies contracting for production of oilseed sunflowers. A limited quantity of breeder seed is on hand for foundation production and maintenance of pedigree stock. V

Seed Barley Early—Researcher

BARLEY IS HIT worse by heat and drought than either wheat or oats. It's probably the reason why late-seeded barley crops do poorly.

In an 8-year test at Brandon, W. H. Johnston found that barley seeded as early as possible in the spring (sandy loam soil), produced 35 per cent more yield than barley seeded 6 weeks later. A 5-week delay caused a 25 per cent loss.

In another test, the average yield of early-seeded barley was 40 per cent higher than the late-seeded barley in 1 year, and 10 per cent greater and 35 per cent greater in 2 other years. In only 1 year—the cool, moist summer of 1956—did late-seeded barley outyield early-seeded barley.

In 1963, Johnston tried different seeding dates with Keystone barley. He got the same story: Keystone seeded on May 1 yielded 84 bushels per acre compared to 50 bushels per acre (40 per cent less) for Keystone seeded on June 5. Seeding on May 20 resulted in a 28 per cent drop in yield.

Says Johnston: barley should be seeded within 2 weeks of the earliest time the land can be worked in order to avoid substantial losses. V



Teaching the teacher

EXPERTS TELL US that almost 90% of all automobile accidents are directly attributable to human failures of one kind or another.

Modern technology has succeeded in making today's cars and roads about as safe as can be. It is time for drivers to catch up—through driver safety training. (Only this type of training will teach young drivers the kind of "safety-thinking" so essential to safe

driving.) But training requires teachers, and teachers themselves must first be taught.

That's why the automobile insurance business, as a part of its national program of promoting safety education for the young drivers, pays the costs of the annual Driver Training Education Program conducted by the Canadian Highway Safety Council for teachers in many parts of Canada.

ALL CANADA INSURANCE FEDERATION

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Proper Grading Important to New Lawns

BUILDING A NEW LAWN? Correct grading is essential to a new lawn according to horticulturists of the Ontario Department of Agriculture. A well-graded lawn slopes gently away from the house on all sides 2 to 4 inches in 10 feet to allow surface water to run off gradually without causing erosion. It is also important to eliminate small hollows and depressions where water may stand.

Avoid steep slopes if possible. The reason: it is difficult to establish and maintain grass on steep slopes and mowing is arduous. Where the grade is steep, build retaining walls.

Once grading is complete, rake the topsoil to a fine condition. Remove all stones and debris. If top soil is in poor condition add well-rotted manure, peat moss or leaf mold. Apply manure at the rate of 1 or 2 cubic yards to each 1,000

square feet. Work into the soil before seeding.

To give grass seedlings a good start, apply a complete fertilizer at the rate of 25 to 30 lb. per 1,000 square feet. Work in thoroughly. For light sandy soils, use a fertilizer

such as 5-20-20; on heavier loams or clay apply 5-20-10. Use fertilizer at recommended rates.

Sow seed at the rate of 3 to 5 lb. per 1,000 square feet. For even seeding use a seeder. To ensure even distribution, divide the seed in half. Sow one-half the mixture in one direction; sow the second half at right angles to it.

After seeding lightly rake the soil to cover the seed to a depth of one-eighth to one-quarter inch by raking the surface in one direction only. When the seed is covered, roll the area to firm the soil around the seed and encourage rapid, uniform germination. Use a fine spray to keep the seedbed evenly moist until seedlings are firmly established. V

Lawn Grasses Best as Mixtures

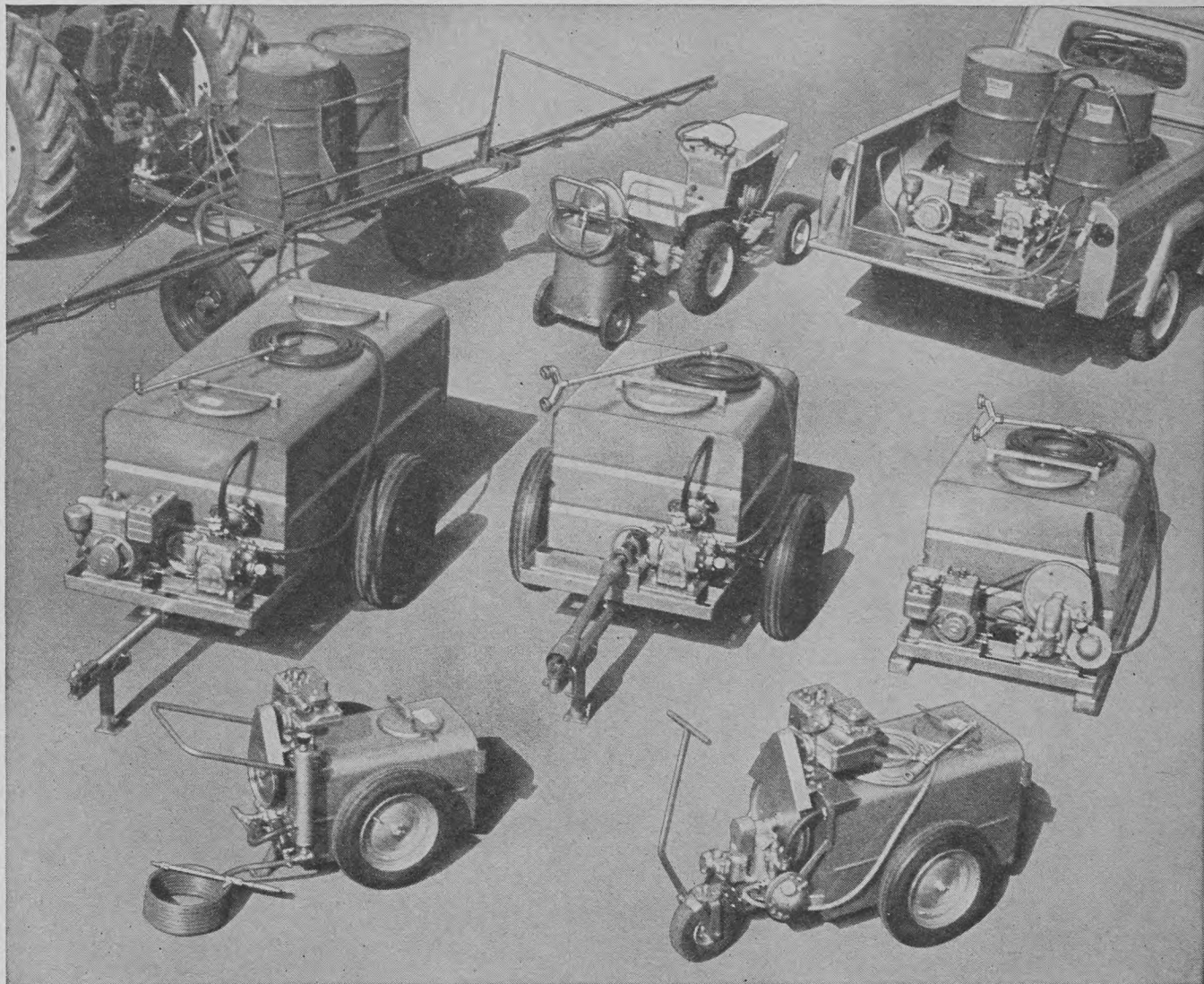
FOR THE AVERAGE lawn, experts advise using a blend or mixture of various grasses rather than all one kind. Mixtures give better results because they contain varieties with different and varied seasons of growth, so that there will be something green and at its best from spring to fall. Such mixtures carefully blended by expert seedsmen are more adaptable to various types of soil, climate and position.

It is possible, of course, for one to go into a seed store, buy several different types of grasses and make up a mixture just as it would be to blend various tobaccos, but it is far simpler for the average person to get mixtures already blended. In this case, he will be sure of getting blends that are especially selected for his part of Canada to give the best results. V

For Best Results Plant Mums in May

MAY IS THE BEST MONTH to plant hardy chrysanthemums in prairie gardens. H. H. Marshall, of the Canada Department of Agriculture experimental station at Brandon, recommends varieties developed to meet prairie weather conditions.

He suggests that plants that have overwintered be divided into small parts every year or two when growth begins. Steps should also be taken to prevent spring flooding. It is also important to give chrysanthemums adequate moisture in August when buds are forming. While many varieties winter safely if the dead plant tops are left in place, Mr. Marshall recommends a light cover of leaves or trash as an extra safeguard. V



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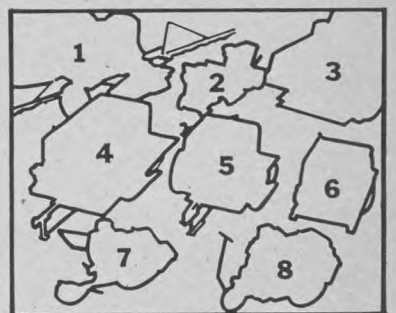
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Dependability? Hudson sprayers are built to last. Like Ten-O-Matic*, the new Hudson 10 gpm pump. No gears, no pistons, no packing, no cups, no greasing or oiling. Tanks with stainless steel or Endurall* liners. Ability to handle DDT, whitewash, other tough materials.

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 6. 150 gal. Peerless on skids, 5 or 10 gpm, up to 400 psi.
 7. 30 gal. Matador®, 3 gpm, up to 250 psi.
 8. 50 gal. Peerless with front-end caster.
- NOTE: Most sprayers shown come in choice of sizes, output, pressure.

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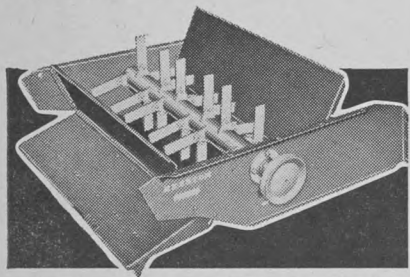
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Management

A New Importance for Farm Credit

- *Measure size of farm by capital invested*
- *Half of Canada's farms lack sufficient capital*
- *Management, credit, go hand in hand*
- *Banks may emphasize income potential rather than net worth*

CANADIAN FARMERS paid out close to \$70 million in interest charges last year on the \$2 billion worth of credit which they hold. It is a sign of the times—further proof that to an increasing extent, farm credit and farm progress go hand in hand.

The ways that farmers obtain and make use of credit went under the magnifying glass at the National Farm and Business Forum in Winnipeg in March. During the session, which was sponsored by the Chamber of Commerce of that city, speaker after speaker (whether farmers, or others connected with agriculture) drove home the point that farmers who can get sufficient credit and manage it wisely are the ones who are making progress.

Farmers can borrow from many sources. Stated Dr. Clay Gilson of the University of Manitoba, "There are few institutions from which farmers have not obtained credit. Federal and Provincial governments, banks, insurance companies, credit



Dr. J. C. Gilson

unions, storekeepers, fertilizer companies, and implement dealers, are only some of them."

To underline the new importance of credit, Dr. Gilson said it makes little sense nowadays to measure the size of the farm business in terms of acres of land operated. "Capital investment appears to be the only meaningful criterion of size-of-business in agriculture," he stated. He pointed out that for the five most westerly provinces (from Ontario to British Columbia) the average capital investment per farm in 1961 was nearly \$38,000. Net income for these farms (in 1960) averaged \$3,000 per farm. By contrast, the capital investment per farm in the four eastern provinces, excluding Newfoundland, was less than half that—at \$18,596. Average net income per farm was only \$1,715.

Stated Gilson, "Massive injections of capital, and drastic reorganization of farms will be required in Eastern Canada if production efficiency is to be increased to a level anywhere near that in the rest of Canada."

Credit Needed for Expansion

He concluded: "One-third to one-half of the farms in Canada do not

have sufficient capital invested in their businesses at the present time to yield an income anywhere near that which is now being attained on larger farms. Credit is needed to help many of these families expand their size of business."

George Owen, chairman of the Farm Credit Corporation, stated the situation in other words, saying that



George Owen

30 per cent of Canadian farmers, or 140,000 of them, earned 70 per cent of the country's gross farm income.

This means, he said, that most farmers have inadequate incomes. Their labor and physical resources are underemployed. Many of these farmers could benefit from better organization of their resources. But he said that more than just capital or credit is required. These people also require sound advice on organization and management. They require help in planning how to invest credit because they are stretching their credit resources to the limit in their efforts to expand and become efficient. Owen went on, "There is a growing need to recognize the differences between the needs of the strong commercial farmers and those with low incomes who may need advice on investment and management as much as they need capital, and without which credit could prove a millstone instead of a life-saver."

It was A. M. Runciman, president, United Grain Growers Limited, a prairie wheat-handling co-operative, who underlined the need for effective management on the farms today. He



A. M. Runciman

recalled that on the farm of 60 years ago, the use of good or bad management practices rarely spelled the success or total failure of the farmer. But he said, "This is not the case today; mismanagement of a highly capitalized farm enterprise can mean bankruptcy for the operator."

He said that the use of effective

management principles is vital not only to ensure profitable farm operation but also to ensure the production of adequate supplies of high quality food and fiber at reasonable prices. The way-of-life approach to farming is yielding to the business approach. Every farmer operates his farm to make a living. To be financially successful, the farm should produce enough income to pay expenses, maintain buildings and equipment, return a fair rate of interest on capital invested, cover the cost of unpaid family labor and return to the operator sufficient payment for his time and management to enable him to maintain an adequate standard of living for his family.

Size of farm business is important, said Runciman. Well-run large farms make more money than well-run small farms. But he hastened to add, all the advantages of scale can be lost by poor operation of the farm, crop losses, or poor prices for products of the farm.

Farm Records Essential

One key to farm management, he said, is the keeping of farm records. Accurate and complete records can be helpful in organizing and using the farm's resources. Without complete records, the assessment of progress is difficult and uncertain. He noted that the Farm Credit Corporation uses electronic accounting procedures on the records of some farmers. Under this system, he noted, data is provided by the operator, processed by the FCC, and summaries of results and projections furnished to the farmer.

So important is this trend, predicted Runciman, that farm extension workers of the future will place less emphasis on production aspects of agriculture, and will devote more attention to helping farmers with their business management problems. Farmers are mastering the techniques of production. Now, the major concern is with the arrangements which must be made to get maximum returns from the land, labor and capital. He said that mail-in farm accounting and farmer hiring of accountants, full or part time, will enable farm people to put meaning into records and consequently extract more from them in the way of guidance for their operation.



John Babcock

Speaking for the banks on the same subject, John Babcock of the Canadian Imperial Bank of Commerce also pointed to the increasing emphasis on farm management. He predicted that as banks consider applications for farm loans in the future, they will put relatively less emphasis on a person's net worth and pay more attention to income potential and to the farm operating statement. These are the very same areas, he stated, that any progressive farmer must analyze in order to make the proper management decisions. —D.R.B. V

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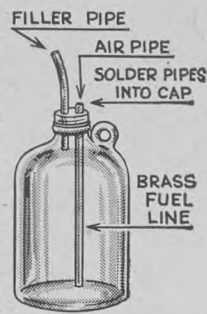
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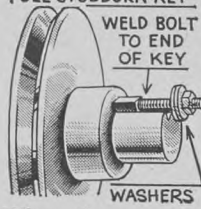
Handy Filler

Here is a handy device for filling a tractor battery with water. Take a 1 gallon jug and drill 2 $\frac{3}{8}$ " holes in the cap. Then take 2 pieces of an old gas line or similar tubing, 1 about 2 $\frac{1}{2}$ " long and the other long enough to almost touch the bottom of the bottle. Insert them into the holes in the cap, solder or weld them into position and screw the cap onto the bottle when full. This saves making a mess when filling the battery. — J.J.M., Alta. ✓



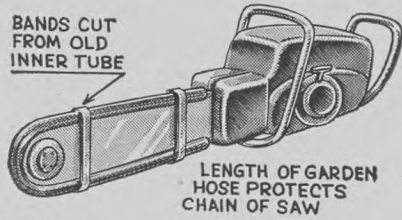
Key Puller

If a pulley key is stubborn and tight and is too short to get a good grip on, make this easy key puller of your own. Weld a piece of threaded bolt onto the end of the key. Slip a few washers onto the bolt and screw on the nut. When the nut reaches the washers it will gradually pull the key out.—H. W., Sask. ✓



Chain Saw Guard

To protect a chain saw chain when carrying it in pickup or car, take a piece of garden hose the length of the chain, split the hose



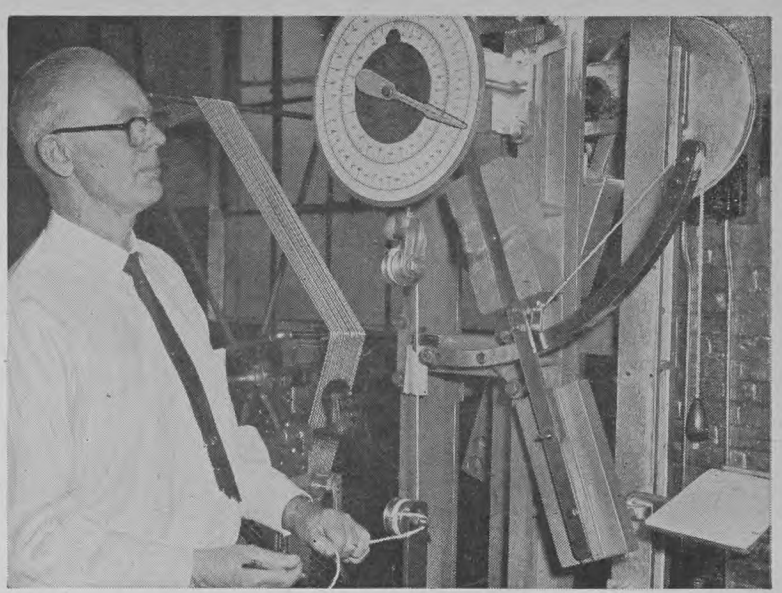
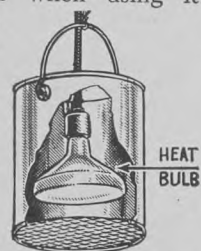
lengthwise, slip hose over chain. This can be held in place by rubber bands cut from an old inner tube. It is also a good way to protect chain when saw is stored.—I.M., Ont. ✓

Non-Slip Grip

A safe grip for slippery oil tins or jars can be made by wrapping a rubber band once or twice around the middle of the container.—J.W., Man. ✓

Safe Heat Lamp

To minimize fire hazard when a heat lamp breaks when using it during farrowing with pigs, I cut the bottom out of a small pail like a one gallon paint pail, fasten a screen over the bottom, and suspend the bulb inside the pail. In this way if the lamp should break, the screen catches the fragments, while allowing the heat and light to pass through.—H.F., Ont. ✓



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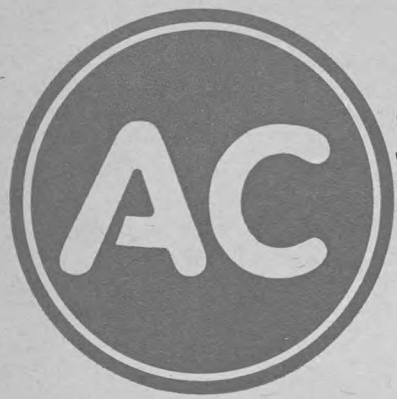
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What's New



High Sprayer

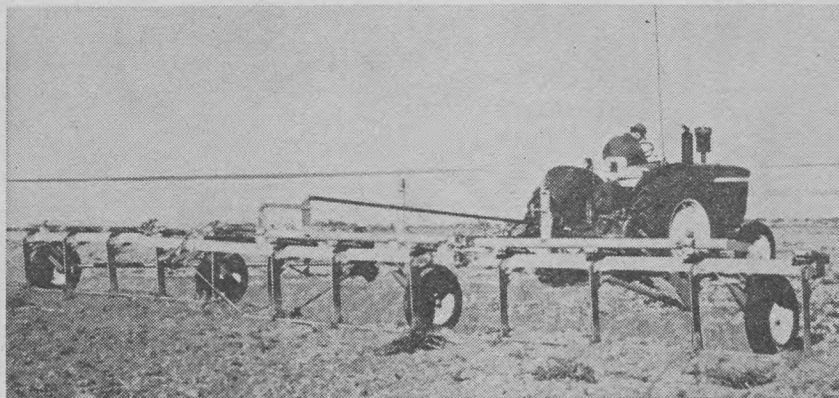
A new method of chemical incorporation is demonstrated by this Hahn Hi-Boy. The tines behind the sprayer nozzles mix the chemical with the soil for maximum efficiency and penetration. The sturdy frame of the Hi-Boy is constructed of tubular steel piping. (Jones and Laughlin Steel Corporation) (461) v

Tank Filter

This new filter has been designed principally for above ground storage of gas and diesel fuel on farms. It has a flow rate of 10 gal. per minute at 30-inch head; weighs 4 lb., and is 7 inches high. The unit is designed to provide final filtration of fuel before it goes into the equipment by arresting solid impurities and trapping water and rust resulting from condensation. (General Filters Inc.) (462) v



P.T.O. Rod Weeder



This new P.T.O.-driven rod weeder is available in 24- 30- 36- and 42-foot lengths and can be put into the transport position within 3 minutes. Units are raised by standard hydraulic cylinder. Each shank is individually spring-loaded. (Midtown Farm Equipment) (463) v

For further information about any item mentioned in "What's New," write to WHAT'S NEW, Country Guide, 1760 Ellice Ave., Winnipeg 21, Man. Please quote the key number that is shown at the end of each item.

A LADY OF QUALITY

by ISABEL STAPLEY

SHE HAD THE BEARING of an aristocrat, the courage of lions, and the temperament of a prima donna.

Gramps brought her home in the dusk of a May evening, and while he went into the old farm kitchen to announce her arrival to Gran, she stamped her small feet impatiently and inspected her surroundings with a faintly supercilious air.

Gramps plunged right in, speaking rapidly as was his way when he had done something of which Gran might not approve.

"I had to wait until they got to her," he said, "and the thing dragged on longer than they expected. But you just come out and see her. She's a beauty!"

"You're late," Gran grumbled, "and besides, a horse is a horse. Trouble is, when you get to visiting around at an auction you never know enough to come home. I suppose you got stuck with another useless plug."

"Plug!" he exclaimed, "this is no plug. This horse, dear lady, comes from racing stock, and she's a better piece of horseflesh than you'll find on any farm in the district."

"Racing stock!" Gran shrieked. "You were sent to buy a work horse!" Such was the relationship between these two that Gramps never merely went somewhere; Gran sent him. More often than not he would be lured from the main purpose of his errand and would return with some completely worthless article.

On one occasion when he was sent to purchase glass for the coldframes, he brought back an enormous steel engraving of a pair of dead ducks. This, he insisted, was a work of art and would continue to increase in value. Not that he would consider parting with such a treasure, of course. With understandable alarm, then, Gran hurried out to inspect this latest folly.

What misfortune had reduced the filly to the level of a country auction we never knew. Blood and breeding were in every line of her, in the

slender frame with its deep chest and delicate, finely-muscled legs, in the set of the head on the arching satin neck. There was intelligence in the well-spaced eyes, and fire too. The color in her coat, had it been in a woman's hair, would have been auburn. Her name was Nellie.

Gran walked completely around the new arrival in cold silence, while Gramps breathlessly pointed out this or that fine point. "And she'll make a wonderful driving horse for the buggy," he concluded.

For long moments they eyed each other, the filly and my grandmother, each sensing in the other an animosity that must lead inevitably to conflict, and each resolving neither to give nor to expect quarter. Finally, Nellie flicked an ear, fixed her gaze on the middle distance, and waited.

"Well, it's done," Gran said flatly. Then, with an edge on each word, she added, "but remember, she was bought to work. She'll work."

Eager for the sanctuary of the stable, Gramps reached for the bridle and clucked to his purchase. Nellie turned obediently, arched her lovely neck, and sank her teeth in his arm. The battle was joined.

NELLIE'S FIRST task, one of the lightest on the farm, was drawing the single-horse cultivator down the rows of market garden plants. About half the acreage was devoted to this crop, and Gramps prided himself on being among the first to offer the season's peas, beans, tomatoes and corn.

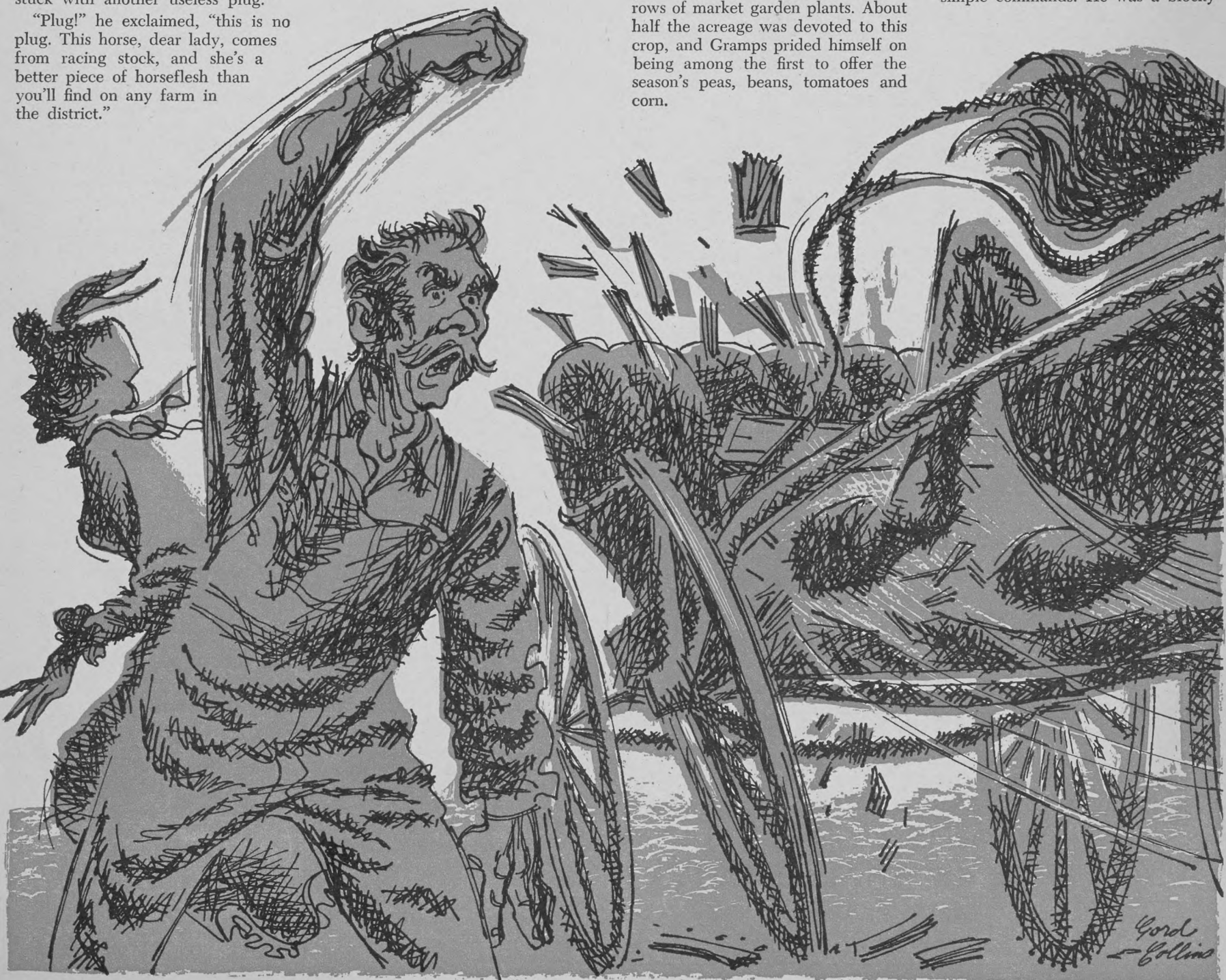
The job lasted exactly five minutes. Not that Nellie refused to work. The duchess in dungarees is still a duchess, and while her manner left no doubt that this plebeian task was beneath her, she appeared nonetheless willing to accept her losses like a lady.

After the first few paces, the instinct of her racing forebears asserted itself. Her stride lengthened and accelerated, while Gramps heaved on the handles of the implement in a vain effort to keep it on course. At last he lost his grip and the thing bucketed wildly through several rows of his choicest peas.

Nellie promptly gave way to equine hysteria. Plunging and snorting, she managed to obliterate a few square yards of crop before coming to a halt. Legs a-tremble, eyes rolling, she stood there in what remained of her harness and neighed shrilly.

Gran came out to survey the damage, after which, in cold fury, she commanded, "Get Dick on the cultivator before this she-devil ruins what's left."

Dick came to us with the farm, and as his former owners had been Russian immigrants, it had taken a little time before he acquired sufficient command of English to obey simple commands. He was a blocky



4-year-old Percheron, placid and powerful, and with an unshakeable faith in the old army maxim: "Do as you are told but never volunteer." In spite of his size he seldom stepped on a plant. When he did, he simply stopped in his tracks and waited for guidance.

In the next three weeks Dick did all the work on the cultivator but Gramps used Nellie frequently on the surrey and the light democrat wagon. He was proud of the way she took to the road, slim legs flying and the sun glinting red on her coat. Sometimes we thought that he invented errands to the village, partly to show off his aristocrat of horse-

flesh and partly to postpone the inevitable time when he must team her with Dick on heavier work of which she might or might not prove capable.

He must have known, too, that the sight of such an ill-matched team would invite the ridicule of neighboring farmers. He had been stung by their laughter when he acquired Nellie's predecessor, a veritable mountain of a Clydesdale named Tom, whose chief talent lay in an ability to lie down and groan whenever there was real work to do.

When Gramps finally hurt himself attempting to assist Tom from a recumbent position, Gran clamped her

lips to silence, waited until spring plowing was completed, then calmly phoned a neighbor to drop over that evening and bring his rifle. With Tom's demise fresh in his mind, Gramps was anxious that Nellie vindicate his faith in her, and fearful of the consequences should she fail.

Accordingly, he took time to pet her and talk to her in an attempt to establish a rapport between them for the testing that lay ahead. The filly seemed to sense that this inept merchant-turned-farmer was her one friend and ally, for she seldom tried to bite him anymore, and would permit him to harness her when no one else could get near.

My grandmother and my mother flatly refused to ride in any vehicle while Nellie was between the shafts. Gran seemed to regard it as a form of capitulation, or at least as tacit approval; and my mother had been so frightened the previous summer by an escaped bull that she went in terror of all but the smallest animals. She would exclaim delightedly over crinkly lambs and pink satin piglets but a month-old calf could put her into full retreat.

The exception was Dolly, the venerable pony that had been with us when we lived in town where, due to a liveryman's neglect, she developed a hoof infection that necessitated lengthy treatment and rest. Complete cure had been pronounced long since, but Dolly's limp invariably returned at the first touch of harness to her back. We children played with her constantly and she was so gentle and slow-moving that even my mother was not afraid to drive her.

Mother readily agreed to go to the village for a bag of insecticide, only to panic at the sight of Nellie on the surrey instead of the pony.

"I won't drive her!" she protested. "Let me take Dolly instead."

"She won't hurt you," Gramps assured her. "Besides, Dolly's too slow. About halfway there she'll go so lame you'll have to walk her and it would be dark before you got back. I'll need that bug killer by three o'clock. Come on, I'll hold her head while you get in."

Pale with terror, Mother obediently took her seat, picked up the reins and as Gramps let go his hold on Nellie's bridle, she clucked faintly.

"Louder," Gramps advised. "Never show fear to an animal. Here, take this," removing the whip from its socket and handing it to her, "and give a flick to let her know you're the boss."

Timidly she did so. Nellie turned her head and looked back for a moment, then stood motionless.

"Harder! That didn't even tickle her."

This time the whip came down with a smart crack and again Nellie looked back briefly over her shoulder. Then she reared high, hoofs flailing, and my mother scarcely had time to scramble to safety before the infuriated animal braced her forefeet and systematically kicked the surrey to matchwood.

Having thus avenged the indignity of the whip, she quieted down enough for Gramps to remove her broken harness and lead her away. By the time Gran arrived to view

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It certainly is not "un-Scriptural" to recognize that Mary is the Mother of Jesus Christ. If we are to be truly "Scriptural," we must further acknowledge that Christ is the eternal Son of the eternal Father — a Divine Person Who assumed a human nature like ours in all things except sin. And while Mary did not give Jesus His divine nature, the Savior was her Son ... as truly as anyone is the son of his own mother.

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It is erroneous, of course, to think that Catholics worship Mary as a divine person. But we do love and ven-

erate her for the unique place she occupies in God's plan for our salvation ... for her intimate association with the all-holy Son of God ... and for her own holiness.

But, you may say — why should we pray to Mary when we can pray directly to God, as the Scriptures command? The answer is that Catholics do pray to God and they seek from Him grace and forgiveness — for these are blessings which only God can grant. But there is no law which commands us ... when we go to Him in prayer ... that we must go alone.

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Copenhagen



**"THE WORLD'S
BEST CHEW"**

the wreckage, Nellie was grazing daintily in the far corner of the pasture and Gramps was nowhere to be found. Supper that evening was eaten in ominous silence.

TO ACCUSTOM Nellie to double harness, Gramps teamed her with Dick for short periods when work necessitated using the heavier farm wagon, and after a few well-placed nips had established the order of things to her satisfaction, she pulled strongly and well, even eagerly.

At that, Gran's attitude softened a little, to Gramp's great relief, and she adopted instead a policy of wait-and-see. Actually, she had no choice. Haying and harvest would require the use of a team, for in the early twenties mechanized farming was still in the experimental stage. This was mid-June and it was extremely doubtful if a satisfactory replacement for Nellie could be found.

The advantages were all with the filly, and something in her turbulent nature impelled her to understand the fact that while she would accept with grace the responsibilities thrust upon her by circumstance, she was and would remain a free spirit.

So it was that on a balmy night Gramps went out to investigate suspicious noises coming from the direction of the oat field and discovered all three horses greedily feasting on the young grain. Dick and Dolly submitted to capture without difficulty, but Nellie led two perspiring men on a rollicking half-hour chase from one end of the field and back again.

When they caught her at last, she appeared to be in some physical discomfort, and so was put in the stable for the night. By morning she had developed such a severe case of colic from the unaccustomed food that she required professional attention. However, she recovered enough to lead two more raids on the oats, each time with identical results, until her veterinary expenses alone equalled the damage to the crop. Gran set the limits to her reprieve—the end of harvest and not a day longer.

NO ONE DOUBTED Nellie's guilt regarding the raids, for the other two horses had never escaped from confinement before. The question was how she accomplished it. After each breakout Gramps replaced the broken wires of the fence with stouter material, strands so thick and strong that it appeared impossible for the most powerful animal to break them, much less one of her slender build.

After the third incident, the aid of the whole family was enlisted to try to discover how the escapes were effected. We herded the culprits down the lane, turned them into the moonlit pasture and after retracing our steps a few paces, we tiptoed back to watch.

Nothing happened for half an hour. Then Nellie nickered softly until she had called the others to her. She jostled them into line, rumps against the fence, and then, to our amazement, led them in a concerted battering-ram attack. When Dick moved from position she nipped him wickedly and bullied him back into line. With each assault the fence

gave a little more and though the wires held, a post snapped and the way was open.

This time we headed them off before they could inflict further damage to the oats. Dick and Dolly were turned into the wood lot for the night and Nellie went to solitary confinement in the small orchard near the barn. Without her leadership the other two lost interest in fences, and the orchard enclosure proved secure enough to resist the efforts of a single animal. From that night on Nellie grazed alone.

Soon the hay was ready for cutting and after teaming Nellie and Dick on the mower for half a day, Gramps predicted that the field would be finished in record time. The filly looked downright fragile beside the bulk of her teammate but it was she who set the pace. Dick liked to pause after reaching a corner and snatch a mouthful to sustain him in his labor. Nellie would have none of that nonsense. Obedient to her driver, she would make the turn and be off down the line of standing crop before he could find time to lower his head.

TO NELLIE life was one long conflict and she did not merely accept each new challenge so much as she went gaily to meet it head-on. She lost weight under the heavy work and at day's end her coat would be stained dark with sweat. Morning, however, would find her as eager and impatient as ever.

Only three loads of cured hay

remained in the field when thunderheads began to build on the horizon and the air took on that breathless, waiting atmosphere that is the forerunner of a storm. Wet hay is ruined hay and Gramps had an anxious eye on the clouds as he said, "Let's try to do it in two loads. I think they can pull it."

We all worked frantically to beat the rain, Gramps and my uncle heaving great forkfuls from the ground, I on the reins and Gran, who could build a better load than the men, catching the coils on her fork as they came up and setting them adroitly into place for a secure, straight-sided load.

The last of the second load was almost on when lightning ripped the black mass overhead and the first big drops began to fall.

"Move 'em child!" cried Gramps, and I slapped the reins to advance the team to the next stop. Nothing happened.

"Move 'em! Move 'em!"

"I can't; Nellie won't go!"

Nellie *couldn't* go. Shaking in every fiber, flanks heaving and foam dribbling from her open mouth, the filly swayed against the wagon-tongue and seemed about to go down.

Forgetting the hay in the face of this graver emergency, the men unhitched her quickly with the aid of a neighbor who came running from his adjoining field in response to their call. Reckless of possible injury, Gran half-climbed, half-slid to the

ground and taking the bridle, led Nellie to the lee of the wagon.

"What's wrong with her? Is she sick?" Gramps asked the neighbor.

"She's about ready to drop from exhaustion," came the blunt reply. "Will, you're new to farming so I guess maybe you never noticed that she's been doing most of the work ever since you teamed her with that black loafer." He jerked his thumb toward Dick who had stood complacently through all the excitement.

Gran's face crumpled and there were tears standing in her eyes as she took up the hem of her full skirt and tenderly wiped the filly's drooling mouth.

"Oh Nellie!" she murmured contritely. "We didn't know! We didn't know!"

Gramps face had a bleak defeated expression as he said quietly, "Well, I suppose it's either find another horse in a hurry, or lose my grain crops."

"No, Will," the neighbor assured him. "Rest her up for a few days and she'll be all right. That little lady is a lot of horse, and she'll handle her share if you just shorten up Dick's traces by two or three links. That way, he'll have to pull whether he wants to or not. It's a shame the way he's just been walking along while she did it all."

AT THAT MOMENT the storm broke. Uncle Bruce swung me onto Dick's broad back and led him as we beat for the barn, with Gramps

(Please turn to page 56)

"GILLETT'S makes sure there's no disease germs lying around"

Ray Dennis is manager of the Sow Unit of Prairie Agencies Ltd., part of a large, modern hog operation near Weyburn, Saskatchewan. An indication of the sound management of this unit is its success in farrowing an average of over ten pigs per litter on 115 sows and weaning over nine pigs to the litter.

To keep down disease, parasites and insects, Ray insists on the use of Gillett's Lye as an important part of the sanitation program. After each litter the farrowing and brooder pens are washed down with Gillett's Lye solution, and three times a year an extra special scrubbing that includes alley-ways is carried out. "Gillett's Lye makes sure there's no disease germs lying around," says Ray.

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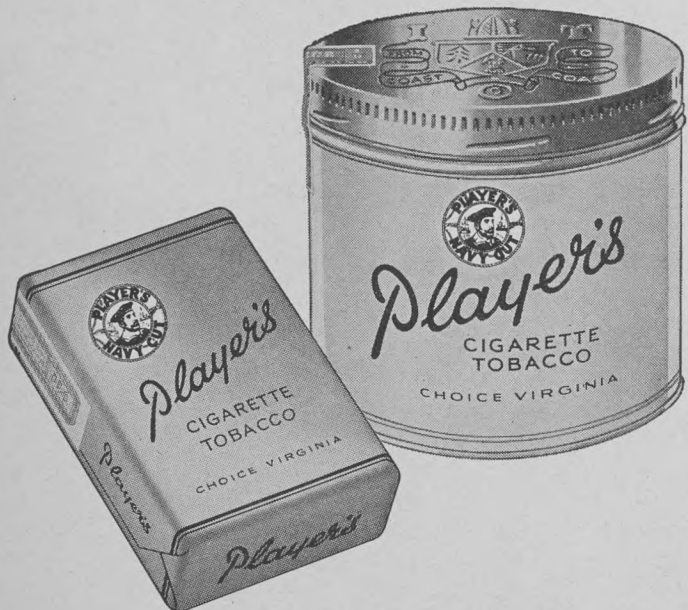
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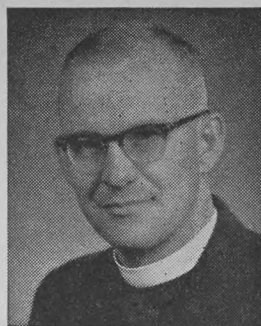
MILD- BUT WITH A SATISFYING TASTE



Smoother rolling—by hand or machine

Let's Think It Over

by THE VERY REV. M. L. GOODMAN



The Learning Curve

About this time the young folks need a little comfort and encouragement as they face the prospect of final exams. I well remember my own ordeals of bygone years. However, there was something I encountered in psychology which helped me a great deal. I always wished I had been aware of it earlier in my career as a student.

It was what is described as THE LEARNING CURVE. This curve is the typical pattern which you get if you plot on a graph the progress of anyone learning a new skill or a new subject. It always shows a steep rise in the beginning. (In sports we would recognize this as "beginner's luck.") Then inevitably there is a leveling off which is called a plateau. (There may even be a slight dip—as the learner seems to lose ground.) Here is the point of discouragement and here is where a lot of people quit. The typical pattern should encourage us, for if the learner persists the "CURVE" starts upwards again, often quite sharply. Later there will be other plateaus, but always, in each case, the line rises once more as a result of continued application.

There is nothing remarkable about this, but to me it's mighty encouraging — not just as a "has been" student but as a Christian — trying to follow Christ.

I suspect the pattern of our following Him is pretty much like the LEARNING CURVE. The great thing is to persist.

Suggested Scripture: II Corinthians IV.

Germ

It was back in 1947 that there was a mysterious outbreak of polio in the Arctic and sub-Arctic around Hudson Bay. The Eskimo population in that area was sadly stricken with a number of deaths and many cases of serious crippling. It was discovered later that one man had carried the disease from place to place infecting all the others, yet he himself had not been recognizably sick. We know that individuals can be "carriers" of various diseases apparently without being ill themselves. Such persons constitute a danger to anyone they meet.

Ideas are very much like germs. Some people are carriers of bad ideas. These ideas have not really taken hold of them. In fact for them the ideas may not be matters of any great importance at all. Yet they are communicated irresponsibly to others. In another mind they may *take root and flourish* with sad results. One of the duties of a Christian is to mind his tongue—to think and speak responsibly.

What kind of an idea carrier are you?

Suggested Scripture: Genesis IV, 1-10, and Matthew XVIII, 1-8.

God Knows

One of the great features of the program of Alcoholic Anonymous is that it is carried out by men who themselves have been alcoholics. They too have been through the mill so there's no condescension, no "holier than thou" attitude. The psychology of an alcoholic is such that it is very difficult for anyone to help him. He says to you or to me—"How can *you* help me? To begin with you can't possibly understand what I'm going through. What do you know about me—how can you participate in my suffering?" But, if someone comes to him who has been where he *is*, someone who does know—someone who's loving and charitable and determined to help—then there is every hope of success. Someone who knows makes all the difference.

So little men, knee deep—or neck deep in the problems of their world, catch God in the corner of their eyes and say, "What have you to do with me? Everything's fine and beautiful where you are. What can you possibly know about this?"

The patriarchs and prophets were not enough, so God came himself. He accounted us worth the Incarnation.

Thus He has an answer to half-defiant, half-despairing men. The answer is this—"I do know—I do understand—for I have shared—I have been one with you that you might become one with me. *I know*. Moreover, do not think that all is fine and beautiful where I am. It cannot be so if all is not well with you. This is no Olympian hill. The clouds of earth dim the brightness of Heaven, and the pangs and sorrows of men pierce the heart of God.

"Look on me and see my wounds. *I* have come among you and I am with you still. I know you, and my whole purpose is that you may come to know me."

Suggested Scripture: Isaiah LIII.

Fair ladies found attractive
"Made-in-Manitoba" styles featured
at this year's Winter Fair

Fashions for the Farm Wife

by ELVA FLETCHER

FAMILY, FOOD AND FASHIONS all have an important place in our woman's world. And that's one reason why there's a "Festival of Fashion" featured on the program at Manitoba's annual Winter Fair at Brandon. The fashion show was introduced 3 years ago as part of the Fair plan to provide something of interest for each member of the farm family. Its success can be judged by the fact that some 700 farm women and their friends filled Brandon's 4-H building to capacity to see the latest of "Made-in-Manitoba" fashions.

Because Brandon is the heart of a predominantly agricultural community it wasn't surprising to find a mingling of town and country among the models. Some of them were city girls; several of them were farm girls who had married city fellows. One farm wife was on stage with her city friends modeling fashionable apparel. The model: pretty Pat Gray.

Pat had modeled only once before—at a fashion show sponsored by a church group. Her recent appearance was her second experience on the fashion runway. "It's fun," she says. And who would disagree with her?

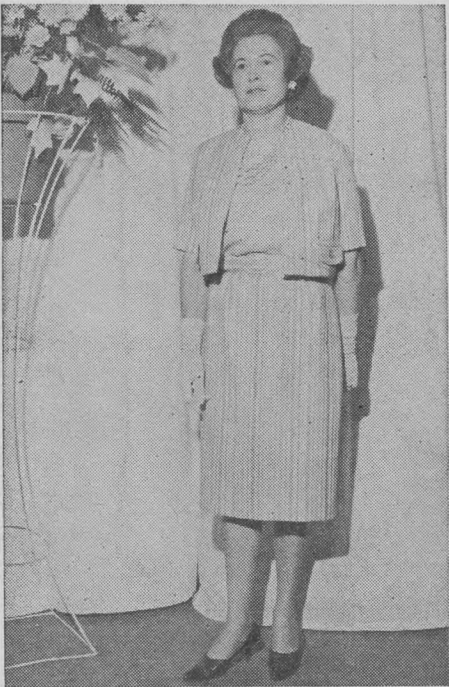
Pat and her husband, Les, and their recently married son, farm on the outskirts of Brandon on land that originally belonged to Les' grandfather. The younger Grays live in town and commute to the farm.

Once the Grays had decided to operate the farm jointly they knew they would need to expand the farm operation to provide an income sufficient for two families. They also decided that it was not feasible to extend the acreage that was sown to grain. They have since found the answer in a secondary project that fits into the present land holding.

The road to the 540-acre Gray farm traces a softly rolling path along the north slope of the Assiniboine Valley a few miles west of the city. Their home is a 3-storey limestone brick house built by Les' grandfather some 60 years ago. Over the years the devotion of a family has given it the dignity of a dowager aunt. It looks down upon the valley's fertile bottom land; in the distance the south bank raises its gentle slope.

Because the Gray farm is so close to Brandon it is natural that Pat would be caught up in activities that embrace both country and city. For example, she is involved in her community's 4-H program. As an assistant 4-H leader, she adds her efforts to those of her neighbor, Eileen Marsden, the garden club leader who lives down the valley road a short distance away. The Grays attend St. Paul's Church in Brandon and Pat devotes much of her free time to its program. This, too, has had its rewards for it has brought her many city friends, and through them, an awareness of their problems as city dwellers. V

Farm wife Pat Gray modeled an outfit of pastel stripes combined with a bone shade. The dress is sleeveless. A straight skirt has a kick pleat at the back. The jacket has set-in sleeves, fake pockets.



For Pat, these coats provided a pleasant contrast. On the left is an adaptation of the popular trench coat in a white wool twill weave; the other is brushed mohair in a soft pink shade. A 3-way belt of black leather lacing nips in the front; the back is free-swinging.



Pat found this dress and coat outfit to her liking. The coat of rayon linen tops a shift-type dress in beige. Contrasting check trims the coat. It has bracelet-length sleeves.

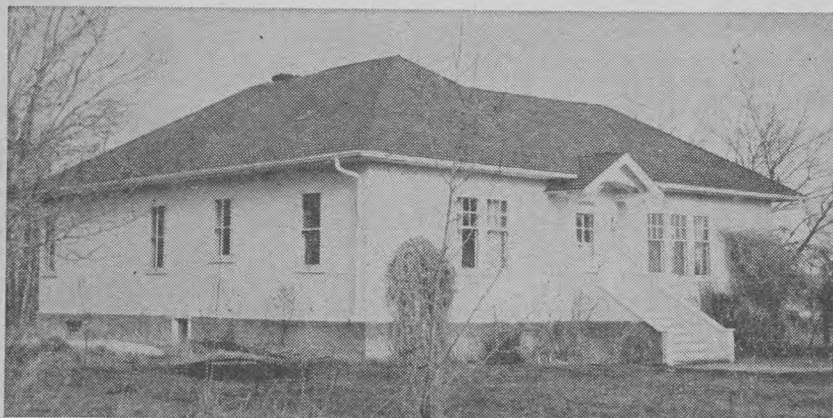


[Man. Dept. of Agriculture photos]

Home and Family



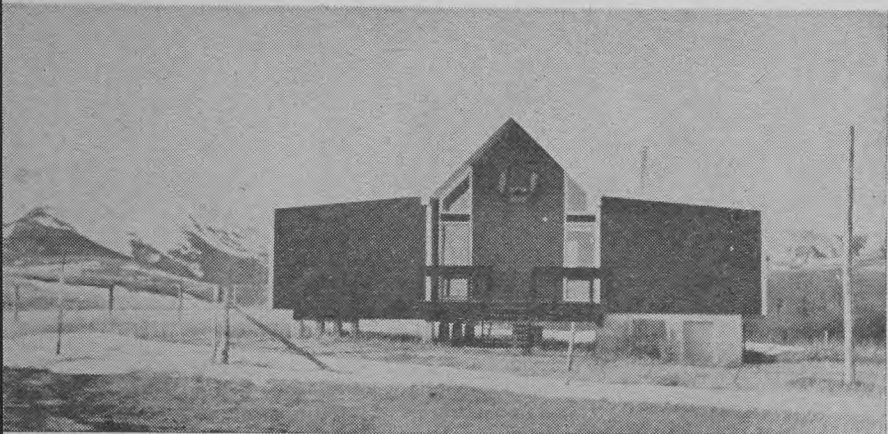
A steady stream of family and friends passes through this gate into the Lynch-Staunton's Antelope Hill Ranch. Now there is a pleasant new guest house for them



Trees, shrubs, lawns and flowers convert the grounds surrounding the Lynch-Staunton's ranch house into an outdoor living-dining room in fine weather



In Willow Valley horses are almost as important as machines for work and pleasure power. For Ontario girls Penny Caton, Marianne Fullerton and Mary Strome one pleasure was a visit to Antelope Butte with Hugh Lynch-Staunton



The new chalet-type guest house takes its cue from the mountain peaks beyond it. It gives the Lynch-Stauntons the additional accommodation they need for the many visitors to their Antelope Hill Ranch in the course of a year

*The Lynch-Stauntons built
a guest house so they could offer
family and friends their own
special brand of*

Open-hearted Hospitality

by **ELVA FLETCHER**

Home Editor

"GRANNY, WE'VE COME BACK. Aren't you glad?" Monica and Frank Lynch-Staunton answered with a guest house for their family and friends built on their Antelope Hill Ranch in Willow Valley. To reach the ranch visitors drive down the Happy Valley road—south, west and south again—as it twists and curls between the Porcupine Hills and the Livingstone mountain range south of Calgary. The Lynch-Stauntons live at the southern end near Lundbreck, Alta.

When the family and friends overflowed the old ranch house, Monica and Frank found themselves faced with two alternatives: they could make still another addition to the old ranch home; or they could build a guest house. They decided to build the guest house.

The two homes contrast sharply in style. The first ranch house—a Topsy-like building—grew to meet family needs. It hugs the land around it, its outline following the soft contour of the valley slopes. The chalet-type guest house, on the other hand, takes its cue from the mountains beyond, its sharply peaked center section spreading out in almost flat-roofed wings on either side. Yet, both blend with the land about them. The common denominator, of course, is the site itself, a place where gentle slopes move up to meet mountain peaks and Todd Creek meanders through a corner of the 10-section North Forks ranch property.

The old ranch home rambles over a large area, its present U-shape the result of the additions. It's a bright, pleasant place that blends gracious living with the hospitality of the old west and fulfills Monica Lynch-Staunton's feeling that a country home should be just as pleasant and comfortable as a city one.

To Monica, the new house is "comfortably modern." Built on a knoll to take advantage of the mountain view to the west, the house is simple in design. The single-level building rests on upright concrete blocks placed to allow air to pass underneath the floor. A partial basement section houses the heating unit and provides some storage space. Four rooms lead from the central living area with its cathedral type ceiling and roof-high windows. Deep eaves give protection from sun, rain and snow.

Water from a new well supplies the guest house. It's what Monica describes as a "real gusher." She hopes that it will allow them to have a fountain in the garden that will take shape once they start to landscape the grounds.

Monica came to Willow Valley as a bride—a city girl unaccustomed to the demands of ranch life. "In winter we'd be isolated for weeks," she reminisces. "It was lonely at first and I had to learn how to cope with a cook stove, gas lanterns and a pump in the kitchen. There was no running water in those days. Roads were only trails, snow plows almost unheard of and in winter the children often rode to school through deep snow. But they loved it and complained when they couldn't ride.

"Of course once electricity came to the valley everything became easier," Monica says. She and her neighbors in the valley now have a variety of twentieth-century conveniences. Washer, dryer, freezer and her well-used dishwasher—a portable model—make life a lot simpler. "I really needed the dishwasher if I wanted to enjoy the summers," she points out, "because we



The Lynch-Stauntons' work and family room is furnished in western style. Picture windows at either end let in lots of light. Hide rugs cover the floor

do have a lot of company." A good gravel road runs the length of the valley. Snow plows keep it clear through the winter and valley children travel to school by bus. "Now we even have TV," she exclaims, "and this seemed unlikely because of our remote location."

The Lynch-Stauntons have built-in recreational outlets in the valley's church and community groups. There's Willow Valley Trophy Club's big game trophy competition. Marina, a daughter, won it one year. St. Martin's Anglican Church Women's Auxiliary cater for the 200 sportsmen and sports-women who gather for an annual rifle and shotgun shoot. There are tennis parties on the ranch court, trail rides and swimming in the creek (when it's warm).

"None of our youngsters seem to want to leave the ranch," Monica says. Marina, one of two married daughters, her husband and twin girls, live in Calgary. Yet they week end at the ranch as often as possible. Betty, her husband and their boys frequently come "home" from nearby Cardston. It was this third-generation population explosion that actually prompted the new guest house—grandchildren were outgrowing the cribs that lined a hallway.

ANTELOPE HILL RANCH HAS BEEN HOME to Lynch-Stauntons ever since Frank's father, Richard, arrived there in the 1890's. Frank, following family tradition, studied to be an engineer. He met Monica Adams at Alberta's university and married her in 1929. Again he followed family tradition—he brought his bride back to the ranch. His son Hugh, a graduate in Commerce of the University of Alberta, seems likely to maintain the tradition. He wants to ranch too.

Over the past 40 years Frank has built up a herd of some 500 Herefords. He puts some 150 acres into grain; another 600 provide hay. He is convinced that it is important to know everything about the ranch operation. "You need records to show you what the operation is doing," he says. For himself, he has complete ranch records back to 1929 and they're his guide to planning each year's operation. Machines now do a lot of the work once done by horses but "horses are still important around here," Frank points out. "We're out on the range early every day and Monica usually comes with me."

In a tightly knit community such as this, valley people find their talents much in demand. Monica is a member of the local school board and a faithful worker at St. Martin's Church.

Frank finds himself a member of the Pincher Creek municipal council and the district health unit. A long-time member of the Western Stock Growers' Association, he is also a member of the American Society of Range Management. More recently he was named to the Canada Council, the organization that is concerned with the development of Canadian culture in the arts, sciences and letters. This post takes him away from the ranch for some days every 3 months. It also brought 23 fellow members for a ranch visit. "We kept all we had room for and our neighbors looked after the rest," he explained. For most Council members, this was their first contact with ranch life and customs.

What connection can there be between a rancher and the development of Canadian culture? According to Frank, he has asked himself this question many times. However, the answer is to be found in a home where well-filled bookshelves contain well-read books; where plays are appreciated; where there is an awareness of Canadian painters; a recognition of Indian and Eskimo cultures; an appreciation for family heirlooms and antiques; in the fact that Monica is herself an artist.

V



The walls in the drawing room of the main house are a delicate blue. Alberta artist Annora Brown painted the attractive wildflower arrangement

One end of the combined family and work room serves Frank as an office. He's proud that he can produce complete ranch records from 1929. Business, community and Canada Council interests absorb a lot of his time



Monica chose French Provincial furniture for the master bedroom in the main ranch house. Her floor covering is a delicately patterned Chinese rug



*Fair time is just around the corner.
Prize-winning entries such as the ones
pictured at left must meet specific standards*

Preparing Fair Entries

EXHIBITS ARE IMPORTANT to fairs. Often the success of a fair is measured by the number and quality of its entries.

Miss Elizabeth Collyer, director of Home Economics for the Extension Service of the Manitoba Department of Agriculture and Conservation, feels that the fair presents a challenge to the whole community. Basically she's concerned that exhibits fulfil the educational aim of the fair. But she sees tremendous possibilities for each community to make its fair different from others and special in its own way. Miss Collyer suggests that fairs provide an excellent opportunity for display and competition in ethnic crafts and food entries. Such classes provide a showcase for the distinctive character of a region, thus a fair which capitalized on this might be developed as a tourist attraction as well as a means of retaining age-old folkways. At the same time, she feels it is important that directors be alert to new trends in foods, fashions and crafts. By observing new trends and introducing new categories to the fair prize list, they can gain new exhibitors and visitors, as well as cultivating the continuing interest of those who have won prizes other years.

In a way, your exhibit is a vote of confidence in your fair, and your community. From competing with other entries you can draw comparisons and learn where you might improve your own methods and your product. In your own interest and that of your fair you will want to observe the following rules:

1. *Read the prize list carefully and observe details such as the number of rolls, cookies, etc., to be exhibited.* An entry of more or less than the number specified must be disqualified no matter how good the product is, or how good it looks.
2. *Display your entry to advantage, making certain that it is clean and neat.* This applies particularly to clothing and craft items. The quality of the product and workmanship is of first importance, but showmanship is a factor in the judging too.
3. *Have your entries in on time.* Closing time for entries must be observed. The judging takes time, and if the judges are delayed in starting they must either rush through their task or finish late. Asking them to rush is unfair to both judges and exhibits; if they finish late many people may have to leave the fair for chores at home before the judging is complete and the exhibits opened.
4. *Fill out your entry forms fully and correctly so that entries can be*

by **GWEN LESLIE**
Home Editor

properly placed by busy directors. As an exhibitor, you know better than anyone which class you prepared your entry for. It's in your own best interest to fill in the entry form so that no director need guess what your intentions were.

SELECTING YOUR ENTRY

Most fairs allow each exhibitor only one entry in any given section. Naturally you will wish to enter the one most likely to win. How do you select it? Here are some of the qualities Manitoba judges look for.

White Bread. Loaves are scored first on their color—an even, golden brown both top and bottom. Judges look for a crust that is $\frac{1}{8}$ " thick, tender yet crisp, and free from cracks, bulges and surface flour. The inside of the loaf is scored for an even, creamy color that is free from streaks; for small even cells; for a light, springy texture that is pleasantly moist. A sweet, nutty flavor and a sweet smell quite free from yeastiness earn points for your entry.

Brown Bread and Buns. Plain baking powder biscuits are scored for a thin, tender crust that is an even, golden brown color, free from brown specks and surface flour. Biscuits which have risen evenly will have a level top and vertical sides. Prize-winning biscuits should have a light, even, flaky grain that will peel into long, thin strips; and an appetizing, fresh flavor (biscuits often have a rather flat taste).

Cakes. Check your prize list to see whether cake is to be iced or not. In either case, cakes should be removed from the pan for exhibiting. Judges look for evidence of even rising in a level or slightly rounded top; even baking in a golden brown crust color; even mixing in a fine grain and light springy texture. They seek a pleasing taste and fragrance—not overly flavored. Icing, if called for, should be smooth, not granular.

Fruit Cake. A 3-lb. fruit cake is suggested for exhibit purposes. The cake should appear evenly risen, evenly mixed and baked through to the center beneath a tender crust. There should be a good proportion of fruit to batter (enough batter to hold the fruit together), and a pleasing flavor which is fruited rather than spicy. The aroma should be free from any rancid overtones.

Cookies. Enter the type of cookie specified in the prize list, e.g. rolled, drop, icebox, gingersnap, etc. Select cookies that are uniform in size and

shape, evenly baked, and free from surface flour. Texture should be tender and rich. Rolled cookies should be crisp; fruit cookies moist and tender.

Pastry. Check your prize list for details about filling, and whether pie is to have one crust, two crusts, or lattice top. A 2-crust pie should appear evenly baked with both top and bottom medium-thick crusts a golden brown. The evenly browned top crust edge should be attached to the bottom one, which should be flaky and tender and free from any sogginess. The filling, sufficiently thick to hold its shape when served, should be of medium depth in proportion to the size of the pie, and its flavor neither over nor under sweet.

A meringue topping should touch the crust edge. The golden brown peaks should show no drops of syrup. Meringue should be tender, and permit cutting without pulling.

Canned Fruit. A jar may be disqualified for an imperfect seal. The container is also judged for appropriate size and shape, for cleanliness and freedom from surface soil. The fruit is scored for retention of original shape, natural color, and freedom from blemishes and spots. The liquid, in proportion of one-third liquid to two-thirds fruit, should be clear and free from cloudiness or sediment. Judges look for small, neat, easily read labels which name the product and give the preserving date. Uniform labels should be used on collections.

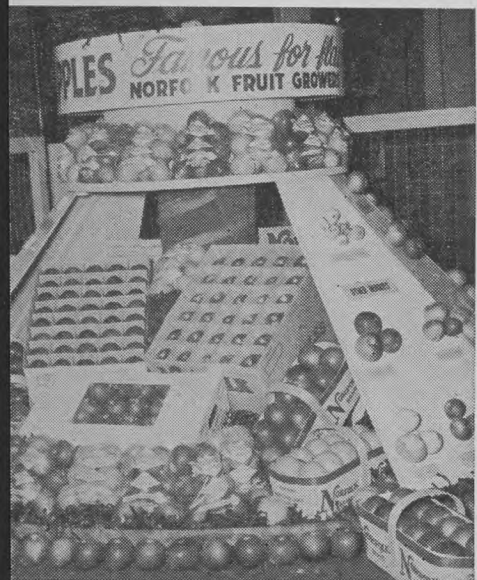
Jams, Conserves and Marmalades. Jams are usually of small fruits, cooked whole to a jelly-like consistency which is soft and easy to spread. Color should be bright and texture relatively uniform. Flavor should be characteristic of the fruit used.

Conserves combine two or more fruits and may contain nuts. There should be no free juice.

Marmalades may be made from pulp and juice, or entire fruits shredded or cut in small pieces. The consistency should be like jam or jelly.

These products are scored for good color, uniform size and distribution of fruit, and thickness of product; for characteristic fruit flavor or a pleasing blend; for clean, suitable container; and for seal of thin wax layer covered with metal or paper.

Jellies. Jelly for judging is considered to be the product of fruit juice entirely free from peel, which has been cooked with sugar until it sets when cold. The texture should be uniform and free from particles. Jelly should be tender, so that an easy cut leaves clear, shining sur-



faces and sharp angles. It should retain its shape when removed from the container, and should quiver but not shake when disturbed. It should not be gummy, syrupy, sticky or rubbery. The flavor should be characteristic of the fruit. Judges look for a clear, sparkling color; a clean suitable container; a seal of thin wax layer covered with metal or paper; and a small neat label bearing the name of the fruit and the date preserved.

Pickles, Relishes and Catsup. Pickles are considered to be large pieces or whole fruits or vegetables in a clear or mustard dressing. The preservatives used are vinegar, salt, sugar and spices.

Relishes are made from the same materials as pickles, but all ingredients are chopped finely.

Catsup is a strained product containing the same types of products as the preceding two. All these products are judged on the basis of color, uniformity of texture, choice and proportion of ingredients, and flavor.

OTHER CLASSES

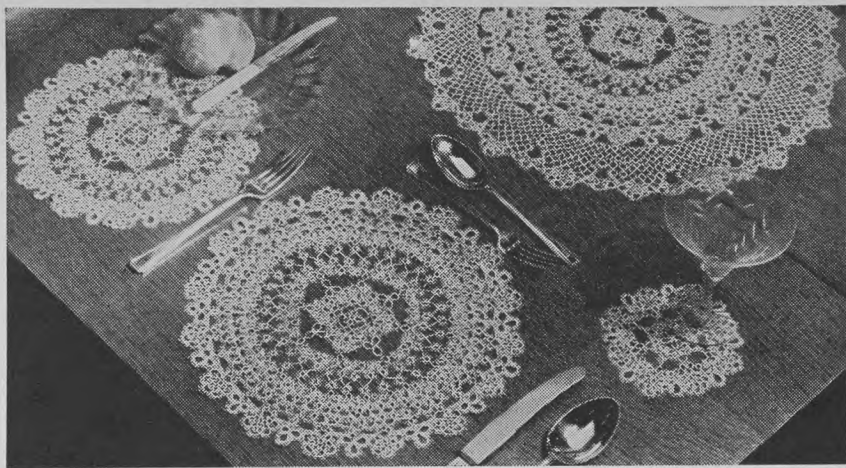
Handwork. This section includes embroidery, tatting, crocheting, knitting, needlepoint, etc. Entries are scored for appropriate and up-to-date design; neatness of finish, fastening of threads, regularity of stitch, and use of the appropriate stitch. The selection of materials is scored for color and durability. Articles should be clean and well pressed.

Sewing. Judges look for suitably finished seams; preference is given to handsewn hems. Articles are judged for style, suitability of design and material; cleanliness and pressing. Judges look for uniform stitching; well-finished seams, button-holes, plackets; for fastened threads; well-finished necklines and hems; and they judge trimming for its attractiveness and suitability to fabric and garment.

Knitting. The method of making the toe and heel may vary in socks; the gusset thumb is considered the best shape in mitts. Articles are judged upon the suitability of yarn, design (plain or fancy), and color; on size and proportion; and on quality of knitting and finish.

Quilts and Comforters. Quilts, with a thin interlining, should be quilted by hand. Comforters, with a thick interlining, may be tied, or quilted by machine or by hand. The joining in pieced quilts may be done by hand or not. However, all applique should be hand sewn. Quilt bindings may be sewn the first time by machine, hand-hemmed the second. Entries in these classes are judged for workmanship other than quilting; for top design and use of color in the design; for the neatness, evenness and fineness of the quilting needlework; and for the appearance of the quilting on the quilt top and back.

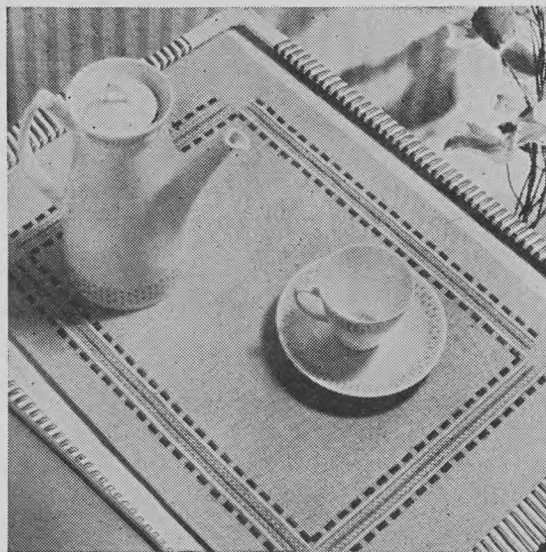
Rugs. Rug classes may be divided as to method, e.g. hooked, crocheted, braided, knotted. Lining is not necessary. Entries are judged for appropriate design and color selection; quality of workmanship in regularity of stitch, braid, etc.; and for originality and initiative in use of materials. V



The delicate tracery of tatting sets a pretty table. Leaflet No. BP-10, 10¢, offers tatting instructions for 4 mat sizes: 5", 9", 12" and 17" in diameter.

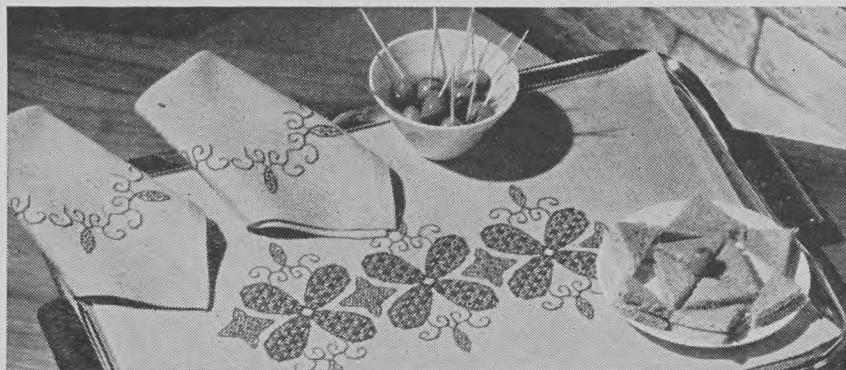
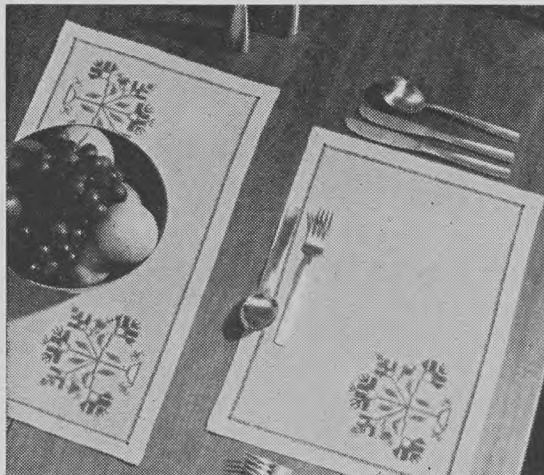
HANDICRAFTS

Mats and Tray Cloths



A combination of Satin stitch, Herringbone, and Couching makes up the attractive design embroidered on this tray cloth. Leaflet No. E-8546, 10¢, gives diagramed stitching directions.

A spray motif embroidered in Cross and Back stitches is used once on place mats; twice on center mat. Order Leaflet No. E-8545, 10¢.



Cross stitch, Back and Whipped Back stitches embroider a tray cloth and napkin set. Order Leaflet No. E-8429, 10¢, for illustrated instructions.

For handicraft patterns pictured above please address your order to Country Guide Needlework Dept., 1760 Ellice Ave., Winnipeg 21, Man.

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Prefer a Liquid? Druggists also have Lydia E. Pinkham Vegetable Compound.

Tips on Freezer Use

IN A FEW short weeks the first of a new summer's garden harvest will be ripe and ready for freezing. This is a good time to check the supply of frozen foods on hand, and plan ahead for another freezer season.

It is poor economy to store foods longer than 12 months. Few foods maintain their top quality beyond this time, and perhaps better use might be made of the space. Efficient use of freezer space dictates that you first allow space for home-produced and seasonal foods, for "good buys" and foods that will not keep any other way—then fill additional space with convenience foods. A check of home-frozen foods on hand now may suggest freezing less of some foods this year and more of others. It may reveal that stocks are low and that this is a good time to give the freezer its annual defrosting. If so, remove and stack remaining frozen food in previously chilled newspaper. Wrap securely and cover with blankets. Remove, wash and dry baskets, dividers and other removable shelves. Wash the inner walls with a mild baking soda solution (1 teaspoon baking soda to 1 quart of water), and dry thoroughly. Lower temperature to zero before replacing the frozen foods.

Organize Equipment

Assemble the equipment you will need for preparing and packaging food for freezing. This includes a cutting board, sharp knives, large cooking pot with tight-fitting lid or steamer for blanching, a wire basket or cheesecloth, colander or sieve, a wide-mouthed funnel (a tin can with both ends removed and one remaining rim flattened slightly will work). At preparation time, you will require a cleared working space near sink and stove, and a supply of cold, running water or ice water.

For packaging, you will want a selection of the following:

- Moisture - vapor - proof wrappings such as freezer paper, heavy aluminum foil, heat-sealing moisture-proof transparent wrap.
- Plastic, metal, glass and special waxed containers in varied sizes.
- Plastic bags and closures. (Elastic bands, metal closures, clothes pins and pipe cleaners.)
- Iron or curling iron for heat-sealing wrappings.
- Freezer tape.
- Freezer marking pen, pencil or crayon to record package contents and date.

Approximate Yields

On the average, you can expect the following yields of frozen food from the given quantity of fresh produce.

Vegetable	Fresh	Frozen
Asparagus	1-1½ lb.	1 pt.
Beans	¾-1 lb.	1 pt.
Broccoli	1 lb.	1 pt.
Carrots	1¼-1½ lb.	1 pt.
Cauliflower	2 med.	3 pt.
Corn	2-2½ lb. (in husks)	1 pt. (cut corn)
Peas	2-2½ lb.	1 pt.
Green peppers	3 peppers	1 pt.
Squash (winter)	3 lb.	2 pt.
Squash (summer)	1-1¼ lb.	1 pt.
Fruits		
Berries	1½-1½ pt.	1 pt.
Cherries	1¼-1½ lb.	1 pt.
Cranberries	½ lb.	1 pt.
Currants	2 qt.	4 pt.
Peaches	6 qt.	6-8 pt.
Plums	6 qt.	6-8 pt.
Raspberries	1 pt.	1 pt.
Rhubarb	¾-1 lb.	1 pt.
Strawberries	¾ qt.	1 pt.
	24 qt. crate	38 pt.

Reminders

The first rule in good freezing technique is *choose high quality food*. Freezing preserves food; it does not improve it. Refer to the list of fruit and vegetable varieties recommended for freezing. Allow as short a time as possible between garden and freezer, and handle small amounts at a time. Follow the freezing directions for the fruit or vegetable you are doing. Package the product in meal-size quantities, and quick-freeze for best results.

Keep the freezer temperature below 0°F.—with each rise of 10° in temperature, storage life is cut in half.

Uncooked Strawberry Jam

3 c. hulled, crushed straw-berries (1½ to 2 qt.) 5 c. sugar 1 pkg. powdered pectin 1 c. water

Combine crushed strawberries with sugar. Let stand 20 minutes, stirring occasionally. Dissolve powdered pectin in water; bring to boil and boil 1 minute. Add pectin solution to the fruit and sugar mixture and stir 2 minutes. Ladle jam into hot jelly glasses, filling to within ½ inch of the rim. Cover and let stand until jellied, 24 to 48 hours. Seal with hot paraffin and cover with metal lids or foil. Freeze. Yields nine 6-oz. glasses of jam.

This jam will store well for several months. Use within a few days after thawing.

Uncooked Peach Jam

3 c. prepared fruit 1 T. lemon juice ¾ c. water 5 c. sugar 1 pkg. powdered pectin ⅛ tsp. grated lemon rind

Wash, peel, and pit about 1½ qt. fully ripe peaches. Chop very finely and measure 3 cups into a large bowl. Add sugar, lemon rind and juice to fruit. Mix well and let stand 15 minutes, stirring occasionally.

Mix water and powdered pectin in a small saucepan. Bring to a boil, and boil hard 1 minute, stirring constantly. Add to fruit mixture; stir briskly for 3 minutes. Ladle jam into hot jars, filling to within ½ inch of rims. Cover at once with tight lids or seals. Let stand 24 hours, then store in freezer. Yields 9 medium jars.—G.L. ✓



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Beachwear



3148

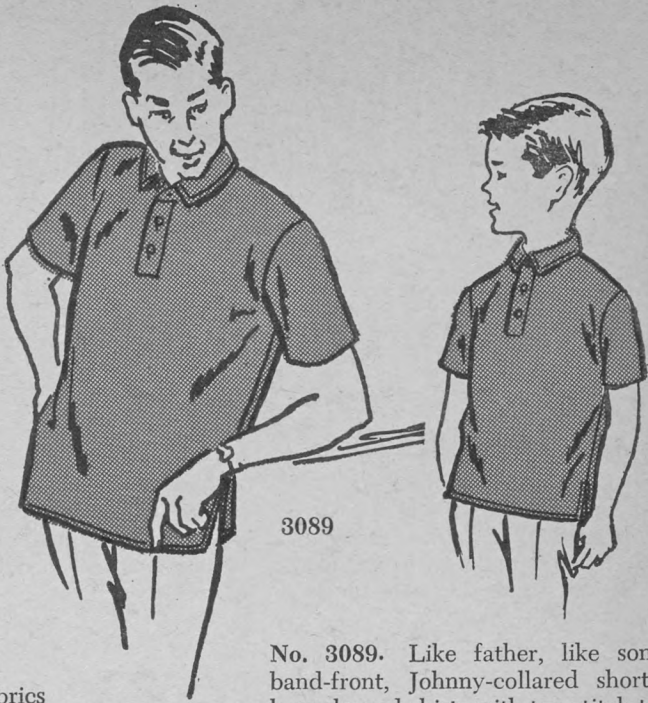
No. 3148. This button-front beachcoat features patch pockets, unmounted sleeves. Make it as a straight-hanging shift or tie it as shown with a drawstring rope belt. Hood optional. Misses' 10, 12, 14, 16, 18; 70¢.

Today, when summer sun and gentle breezes beckon us to leisure-time activities, we can dress to suit the setting. More than ever before, we're dressing in a special way for special occasions and activities. For the homemaker who sews, the variety in patterns and fabrics provides a wonderful opportunity for individuality in the family's free-swinging casual clothes. Certain fabrics seem to be the natural choice for certain outfits — for example, cosily absorbent terry cloth for the after-swim beachcoat at left. Terry cloth is available in a wide range of plain colors and in gay prints as well. Terry cloth is also the obvious choice for lining the father and son cabana set jackets at right. Popular knitted fabrics could be used to good advantage in the sports shirts above and beachwear below.



3158

No. 3158. Girls' sportswear presents a lined 2-piece bathing suit combining fitted briefs and sleeveless, scoop-neck overblouse with elastic at hem. A pull-on beachdress features patch pocket and long, raglan-style sleeves. Girls' sizes 7, 8, 10, 12, and 14. Pattern price 60¢.



3089

No. 3089. Like father, like son in band-front, Johnny-collared short or long-sleeved shirts with top-stitch trim. Men's Small (14-14½ neck); Med. (15-15½); Large (16-16½). Boys' Small (size 4-6); Med. (8-10); Large (12-14). Pattern price is 60¢.



cabana set
for men and boys

3124

No. 3124. Sportswear pattern for men and boys features fitted shorts, and terry-lined short-sleeved jacket, and a zipper-front hooded pullover with elasticized hem and cuffs. Men's and Boys' sizes Small, Med., Large as detailed above; 75¢.

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Andy's Surprise

by SHIRLEY MASKEWICH

TILLY, THE TURKEY that lived on Andy's farm, had hidden her nest again this year! It was important to find it, mother said, because Tilly was not a very good mother, and when the little turkeys

hatched, someone must take care of them. Tilly wouldn't. Mother promised Andy that if he could find Tilly's nest, she would give him a surprise—something he had been wanting for a long time.

Andy thought and thought, but he could not seem to remember what it was he had been wanting for a long time. Of course, there was one thing. But he didn't believe for a minute that could be the surprise mother meant. It was red and shiny; but he would not even let himself think about it, because when he did it made him feel sad. Would he ever have one, he wondered.

He tried to think of all the places Tilly might hide her nest. He looked in all of them. He looked in the hayloft and down by the strawstack. He climbed to the top of the hill behind the barn, and searched around the old sleigh runners. By half-past four he still hadn't found it and he was very tired.

As Andy plodded down the path to his house, he had an idea. He

would ask the farm animals to help him. There was Frisky, the colt, with his nose over the rails. He would start with Frisky.

"Hi, Frisky," Andy said. "Have you seen Tilly's nest?"

"I'll give you a clue," said Frisky, kicking up his heels and frisking around the pasture a few times. "Ready?"

"Ready," said Andy, listening carefully, because Frisky wouldn't be still and it was hard to hear what he was saying.

"Up awhile

And down awhile,

Ask someone that says 'moo,'

But whisper so you won't waken

Little Boy Blue!"

Andy thought about the clue. Cows say "moo," so he guessed he would have to ask one of them, but where were the cows? They might be anywhere in the pasture. And Andy was so tired of walking. What of the last line—about Little Boy Blue? Andy said the nursery rhyme to himself. Boy Blue was sleeping under a haystack wasn't he? Oh, now he knew! Andy climbed up the little hill and down the other side. There, by the haystack, was Daisy, his favorite cow, chewing her cud with her eyes half-closed.

"Hi, Daisy," Andy said. "Have you seen Tilly's nest?"

"I'll give you a clue," Daisy said sleepily, opening her eyes a little wider. "Ready?"

"Ready," said Andy.

"Over once

And under once,

Ask someone who can cluck;

Don't step on Mary's cockle shells,
or you'll be out of luck!"

Andy thought about the clue Daisy had given him. Hens cluck, so he guessed he would have to ask one of them. But which one? There were so many. Then he remembered the last line—the one about Mary's cockle shells. That must mean Mary, Mary, quite contrary. Mary's cockle shells were growing in a garden. So that was it! Andy took the short cut to the garden over the little bridge that crossed the creek, and under the garden fence. There, pecking away at the lettuce, was Hattie, his favorite hen.

"Hi, Hattie," Andy said. "Have you seen Tilly's nest?"

"I'll give you a clue," said Hattie, pecking away as busily as ever. "Ready?"

"Ready," said Andy.

"If you go west





You'll find the nest,

Look under something new;

"Don't sample Jackie's Christmas
pie, unless he asks you to!"

What about this clue? Andy turned west, but all he could see was the big machine shed. Would Tilly hide her nest in there? Then he remembered the last line—Jackie's Christmas pie. That must mean Little Jack Horner, who sat in a corner. Oh, ho! Now he knew!

He hurried into the shed, and there in the far corner, where the sun streamed in the window, was a big, new shiny-red wagon—just what he had been wanting for a long, long time. And what do you suppose was hidden under the big, new, shiny-red wagon? Hattie Hen gave you a clue. Can you guess? V

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Are You Ready to Answer?

WHEN WARM SUMMER days and evenings summon us outdoors, it isn't always easy to settle down to systematic study. Still, June exams make it a case of now or never. Perhaps you already have a satisfactory system that you'd share with us.

If not, how would you answer these questions?

1. Do you have a good place to study?
2. Do you have a routine that includes regular study periods each day?
3. Do you study with radio and TV on?
4. Do you tackle your work in order of its importance?
5. Do you study with your friends?
6. Do you engage in long conversations during your study time?
7. Do you go to other family members for help with your studies?
8. Do you do assignments as they are given?
9. Do you question why you must learn?
10. Do you feel you might never use the information?

1. To make the most of our study periods we need a quiet place that has adequate lighting during the day and in the evening as well.

2. Most of us need to make a study schedule. In other words we need to assess how much time we need for study and then stick to it.

3. If we're honest with ourselves we'll admit that we can't concentrate nearly as well when there is music or other sound around. Research has already proved this to be so. This is a good enough argument for turning them off.

4. Most of us are tempted to do the assignments we like best before all the others. In practice it's better to start with the most difficult ones, work at the assignment that is due or work at the subject we find most difficult.

5. Why not work on our own? It's better this way. We're not so likely to become involved in casual conversation or caught up in other distractions.

6. Interruptions cut down our efficiency. If we're really serious about our studies we can catch up on phone calls or other messages when the study time is over.

7. Most of us need help with our studies at one time or another. However, we don't learn by having someone else solve our problems.

8. There is only one reason for assignments: to help us to learn. If we don't do the assignments we won't acquire the learning we'll need later on.

9. and 10. A "yes" answer to these questions suggests that we are something less than objective in our thoughts on learning. No one ever knows what use he may or may not make of the learning he acquires and most of us need the mental discipline that it represents. ✓

Homemakers' Hints

When stringing beads with very small holes, dip the string or thread in glue or colorless nail polish. When dry it will be stiff enough to act as a needle.—Mrs. M. Tenaschuk, Handel, Sask.

places. This method is several times faster, much easier, and less tiring than using a brush only.—Mrs. John Oddan, Marshall, Sask.

If hubby's lunch-box reeks of gas, don't despair! Just wipe it thoroughly, inside and out, with diluted vinegar. Wash in soapsuds, then rinse and the lunch-box will be fresh and odorless.

Last summer we painted an out-building, a picket fence, flush doors, kitchen cupboards and a chest of drawers with a paint roller. We followed up with a brush to smooth the paint and touch up hard-to-get-at

You will find that planning your shopping day ahead of time will save you a lot of unnecessary walking or driving. Just mark down your chores in order of their location and you will get all your shopping done in less time.—Mrs. Phil Besler, Melville, Sask.

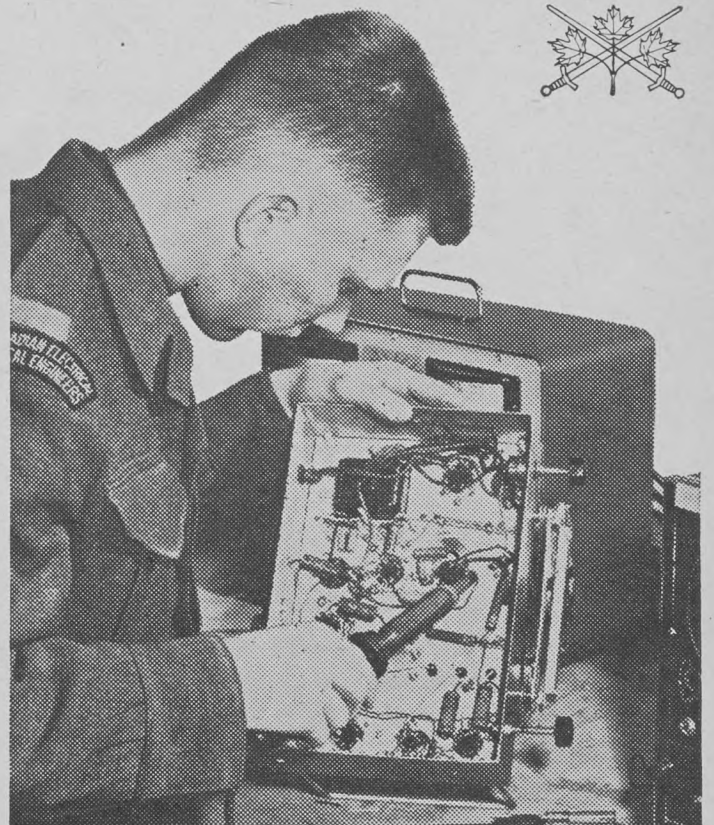
When picking pin feathers from poultry, use a pair of tweezers and save your fingers.—Mrs. Adele Kruszelnicki, Vanguard, Sask. ✓

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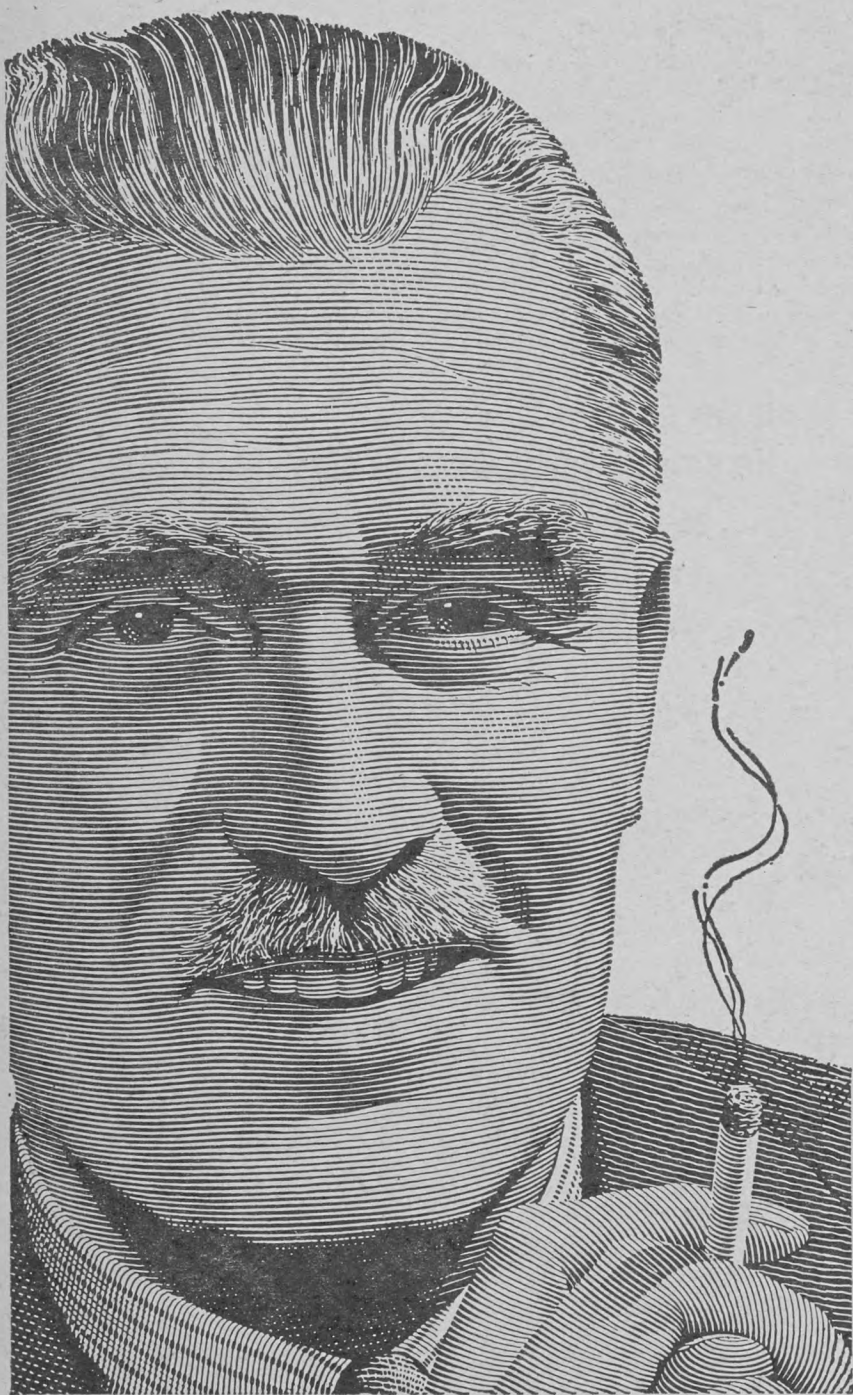
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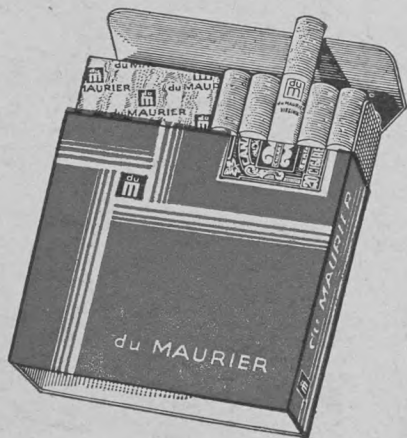
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Farm Groups

Swine Industry Tries National Planning

CHANGES MAY be in the offing for the swine industry. Hog men from across the country, meeting in Montreal at the Swine Improvement Conference, which was organized by the Canadian Federation of Agriculture, built a policy framework on which they hope the industry can move ahead. Implications of the conference are discussed in detail on the editorial page in this issue of Country Guide, but the details of what took place will be of interest to all hog producers.

The conference drew up a draft policy which includes these highlights:

- More use should be made of the Record of Performance testing program for purebreds. An elite, or prestige breeding program, based on ROP records and with basic health standards should be established in each province. This would identify hog men who can sell healthy breeding stock with the ability to produce quality carcasses efficiently.

- Greater recognition should be given to the value of purebred stock both for perpetuating the breeds and as sources for 2- and 3-way crosses. However, progeny of purebred stock should be eligible for registration only if standards of type and performance are met.

- More test station facilities for purebred hogs should be provided, as well as special test stations for specific pathogen free swine.

- Test stations should be run on an "all in—all out" basis. This might be facilitated by estrous control in swine herds. It was noted that following a clean-up period at the Ontario test station, a group of 200 hogs went to market 2 weeks earlier than usual and required 40 pounds less feed apiece, thereby indicating the debilitating effects of diseases which inevitably build up in test stations.

- Financial assistance to the breeder of superior stock is essential.

- Hog grading systems are good, but not good enough, in the view of the conference. More research is needed on carcass evaluation and market requirements. Emphasis should be placed on the positive factors, such as meatiness—the negative view, that of absence of fat, is not enough.

- There is need for a new and higher grade for carcasses, such as is found in European countries. An additional bonus for such quality is required.

- Producers should co-operate with other groups in the swine industry. Research and technological advances should be fed back to the producer who can make use of them.

- Proper breeding and feeding practices are important, but these can be wasted if there are health problems. A national herd health program under the direction of the Health of Animals Division is required.

- Producers should help pay for research aimed at hog improvement. A contribution of 5 cents per hog was suggested for a start, with the suggestion that this might encourage support from other segments of the industry.

Wide-ranging discussions marked the 2-day meeting.

In one submission, the Ontario group stated that the pigs available as breeding stock, or for feeding purposes "lack the consistency necessary to hit the premium market as often as should be desirable. All purebred stock is not good stock and all good stock is not purebred. Good breeding stock must have more than a pedigree."

Idea for the conference was born in the CFA convention in 1963. The strength of the delegations from nine provinces indicated that it struck a responsive chord; that producers are aware they must compete with producers of other meats, and improve the quality of their hogs at an accelerated pace if they are to hold and expand their premium market in the U.S.

In one report from government officers who took part in a "Mission to Europe," Canadian hog men were advised to emulate the progress being made in Britain and Europe. The mission went abroad to gather evidence for the conference and it came back with stimulating and disquieting facts which were considered by the delegates. In each European country visited, the producer played the star role and was the key to his own success. J. G. Stothart of Lacombe, Alta., said: "Producers in Europe are more closely tied to their industry than their counterparts in Canada. The ultimate is found in Scandinavia where the producer owns the bacon factory. If the factory does not produce what the market demands, responsibility comes to rest on the producer. In Denmark the national breeding herd is composed of 243 qualified purebred breeders. A basic concept for the right to sell breeding stock is selection, based on testing. The Danes have decreased fat, increased length and reduced feed requirements. Their testing program is essentially the same as ours—the difference is that they use it consistently. The Danish farmer even has to serve a form of apprenticeship before he can be recognized as a breeder."

Dr. C. L'Ecuyer, of the Federal Animal Diseases Research Institute, pointed to the mandatory marking of all hogs marketed in Sweden. "All herds are visited regularly, heads

are examined for atrophic rhinitis, the lungs for virus pneumonia and the liver for worm infestations. The marking of hogs facilitates tracing the source in case of disease."

Ralph Bennet, director of the CDA Livestock Branch said: "Denmark produces 80 per cent 'A' hogs and grading ensures that no hog goes on the export market which does not meet exacting requirements. European grading standards are similar to those in force in Canada, with the exception that their specifications are tighter for the top grades."

News Highlights

The New Brunswick Department of Agriculture has initiated two new swine policies. One of them provides for a \$20 bonus to be paid on the purchase of Grade AAA gilts and \$15 on Grade AA gilts. The other, a boar premium policy, offers a premium to breeders who sell high quality boars to commercial producers at reasonable prices.

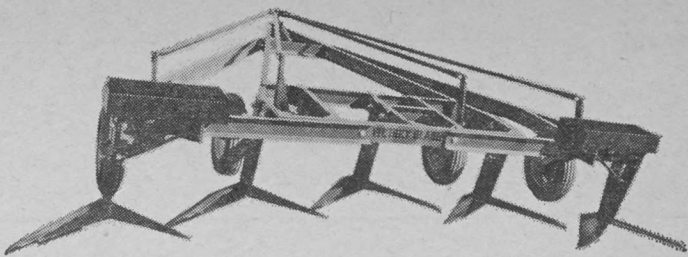
Short courses on farmstead mechanization will be made available to Saskatchewan farmers starting this fall. They will be conducted by Family Farm Improvement Branch personnel. Included in the topics to be offered are hog and beef cattle housing and mechanization, feed

Sten Berg, vociferous spokesman for the Western Hog Growers Association asserted: "There is no room for complacency in Canadian hog quality, when compared with other parts of the world; the U.S. can offer us severe competition in the future. Cut-out tests show extreme variations within grades. I look forward to the payment for individual hogs on a cut-out basis." Some criticism also came from Mrs. A. Plumtre, president of the Consumers' Association of Canada: "There is great dissatisfaction; we cannot buy a consistent product."—P.L. ✓

handling and shelters, farmstead and farmhouse planning, ventilation and insulation, and several others.

Apple growers in the Keswick, N.B., area have organized a new apple storage co-operative. They will construct a 16,000 - bushel - capacity cold storage plant this year.

Robert Thomas has been appointed director of the Plant Products Division, Canada Department of Agriculture. He succeeds C. R. Phillips, now program co-ordinator for Production and Marketing. Mr. Thomas comes to Ottawa from Montreal where he was supervisor of the division's Quebec district. ✓



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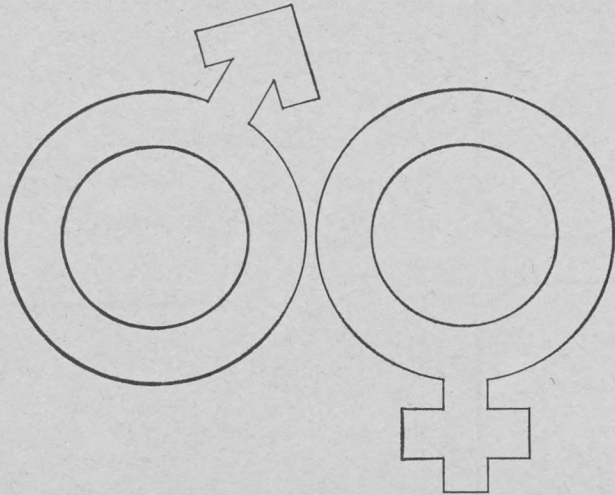
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A LADY OF QUALITY

(Continued from page 43)

hurrying ahead to open gates. Gran insisted on leading Nellie herself and the two of them reached shelter long after the rest of us. Though her hair was slicked to her head from the downpour and her clothing plastered tight to her body, she held her stumbling charge to a slow walk and not until she had seen Nellie to a stall and wiped her dry with sackings would she attend to her own needs.

After a few days of rest, Nellie resumed her place on the team, and Gran saw to it that she was given extra oats at every feeding and that Dick's traces were rigged to ensure that he pulled his full share.

Stern and domineering as my grandmother was, she was also fair, and now she went out of her way to make up for her former injustice. Never again was Nellie referred to as "that she-devil," and we children soon learned that any reference to her former transgressions would result in our being sent to do some unwelcome chore. Gran developed a blind eye for the occasional fit of temperament, for the filly remained a rebel at heart and could change in a moment from soft-eyed gentility to lashing, shrieking fury.

Harvest came and went but Nellie remained and in time became something of a legend in the district. Farmers who came to jeer went

away impressed by this great-hearted little horse. Gramps maintained that she could outwork and outlast any horse in the district and outthink most people. When those of lesser lineage quit on some difficult task, he would suggest putting Nellie in their place, and she never failed him. Digging in her small hoofs and straining until at times she was almost belly-down, she would exert every sinew of her wiry frame, while he called encouragement beside her.

After five years Gramps gave up farming and all the animals were sold at auction. It was a sad day for all of us and I went along with Gran when she went to say good-bye to Nellie before her new owner, a stranger, led her away.

"You have a great little horse here, mister," she said to him. "She's high-spirited and sometimes downright devilish, but if you have a little patience with her she'll work her heart out for you."

"Got a good team for heavy work," the man returned. "I'll use her as a driver and my son will ride her to high school. I like a horse with spirit and from all I've heard this little girl is all fire and guts."

My grandmother stroked the velvet muzzle, patted the shining neck and ran her hand gently down a slender foreleg.

"Hear that, Nellie-girl? You'll carry a saddle! You'll like that. You'll like it because it's what you were born to do." Then, with a final pat, Gran marched back to the house. V



Hi FOLKS:

Ted Corbett is worried about what's happening to our food these days, especially the meat.

"When somebody tells me they can take an old beat-up rodeo cow," he said, "and turn her into tender prime beef by giving her a shot of some juice just before she dies, I get a creepy feeling way down inside."

"Well they can," I told him. "About 5 c.c. of that there juice and the old buzzard bait is tender as prime veal. In fact, except for a kind of woolly taste like you were chomping an old sock, you'd swear you were eating real meat."

"That's what I'm afraid of — the taste," he said. "Petrifyin' a poor beast with papaya juice so its muscles go all flabby will kill the taste. Soon you won't know if you're eating beef or chicken."

"Come now, chicken doesn't taste so bad," I protested.

"I didn't say it tastes bad," he said. "It's white and meaty and soft, but it just don't taste like chicken. In fact, if you didn't fry 'er in a fancy batter of some sort it wouldn't taste like anything at all."

"How do you account for that?"

"Because chicken these days is a sort of automated jailbird," he explained. "It never gets to live a

full life. Right from the start the poor critter is jammed into a cage with a bunch of other prisoners. Water and food is flung at it by machines until it gets so big it can't move a muscle. Then a machine bumps it off, and another machine takes a rubber hose and flogs the living daylight out of the body until all the feathers fall off."

"Kind of grim when you put it that way," I admitted.

"It's more than grim — it's inhuman," he growled. "Now compare that to the life of the old farmyard hen we used to know. She spent her life wandering freely around, pecking gaily at this and that. She had to dodge hawks, raccoons, skunks, foxes and weasels. Sometimes the wife would even take a whack at her with the broom. But all the while she was really living, and it's living that adds flavor."

"Come the day you felt like a chicken dinner, the pace of living picked up. You grabbed an axe and took after that old hen like a man possessed. The hen had lots of excitement, and you work up a whopping big appetite."

"When the end came there was blood on the block, on your pants and all over the yard. But you had yourself a chicken. And MAN did it ever taste good!"

"Caging and forcing hens isn't exactly the same as spiking a grown steer with juice," I pointed out.

"The result's the same," he snorted. "Once you depart from the natural process you lose the natural flavor. Just you wait and see."

Sincerely,
PETE WILLIAMS.